NAVAL POSTGRADUATE SCHOOL
Monterey, California

THESIS

COST ALLOCATION PLANS FOR MUNICIPALITIES
FOR INTERNAL MANAGEMENT AND GRANT PROGRAMS

by

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and
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March 1981

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REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER	2. GOVT ACCESSION NO. / 3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle): Cost Allocation Plans for Municipalities for Internal Management and Grant Programs	5. TYPE OF REPORT & PERIOD COVERED: Master's Thesis, March, 1981
	6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s): Barron Ray Benroth and Robert Francis Fremont III	8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS: Naval Postgraduate School, Monterey, California 93940	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS: Naval Postgraduate School, Monterey, California 93940	12. REPORT DATE: March, 1981
	13. NUMBER OF PAGES: 202
14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office)	15. SECURITY CLASS. (of this report): Unclassified
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release, distribution unlimited

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Allowable Cost	Direct Cost	Grants	Mission Centers
Cost Accounting	Indirect Cost	Audit	Service Centers
Cost Allocation	Municipal Government		Support Centers
Cost Allocation Plan	Single Audit Concept		

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This thesis is a discussion of and presentation of cost allocation plans for municipal governments for internal management and Federal grant reimbursement purposes. The authors present information concerning the current state of the art in cost accounting for cost allocation including classification of cost, responsibility accounting and various cost allocation methodologies. The authors discuss the application of Federal rules, regulations

and guidelines to grants with emphasis on allowable and unallowable cost, audit requirements and responsibilities and the single audit concept.

The authors develop and present two cost allocation plans utilizing data and information from a municipality; the City of Monterey, California. The first plan is for internal management purposes for supporting pricing and fee for service decisions. The second plan is applicable to Federal grants for the reimbursement of "eligible" indirect costs.

The authors contend that municipalities can benefit from the preparation of a cost allocation plan even though some argue against cost allocation outside the "private" sector.

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Cost Allocation Plans for Municipalities for Internal Management And Grant Programs

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MASTER OF SCIENCE IN MANAGEMENT

from the

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Thesis
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I. INTRODUCTION

A. THE PROBLEM DEFINITION

Cost accounting techniques have generally been considered applicable to only manufacturing operations, but in todays environment this idea is no longer valid. [1:10] The authors contend that timely and meaningful information concerning cost is vital for management's effective and competent planning and control of any organization.

Cost allocation concepts, techniques and methodologies are generally absent in the financial management of municipal governments based on the authors' background research for this thesis. As the operation of municipal governments becomes more complex because of community growth and expansion and extensive involvement from the State and Federal governments the need for accurate, timely and meaningful cost of operation information should change. This changed information base should include a means of accumulating not only the direct cost of operating any particular department, program or project, but should also include a means of accumulating indirect (overhead) costs. It should also include a suitable method of allocating those costs to various causal or benefitting departments, programs or projects to identify the total cost (direct plus indirect) associated with those departments, programs or projects. [1:257]

Several points support the need for total cost accumulation and indirect cost allocation. First, the full or total cost of operating any particular department is the sum of its direct cost and the allocable portion of the organization's indirect cost. Services provided to one department by another department, although non-billable, are not free and should be recognized in the receiving department as a cost of operation. Second, municipalities provide services to the public at large and at times to other municipalities. Under these circumstances, the department providing the service should know the total/full cost of operating the department (its direct cost plus its allocated portion of the organization indirect cost) in order to determine and support a pricing or fee for service decision. Third, municipal governments participate in grant-in-aid and contract programs with State and Federal governments and agencies.

Recovery of direct dollars spent by the municipal government under a grant or contract does not normally present a problem to the manager. [2] However, because of the lack of accurate and effective means (cost allocation plan) to determine indirect costs attributable to a grant or contract program, indirect costs are often not accumulated and allocated, resulting in municipalities funding costs that should be appropriately and legitimately borne by the State or Federal government. [2:73]

In California, and now in many other states [3] tax payer relief legislation such as California's Proposition 13, the Jarvis-Gann initiative which limited property tax in 1977 and the 1980 Gann initiative to limit spending, should encourage municipal managers to fully understand the total cost of operating departments. Municipal managers should understand total cost not only for planning and control but also for determining the full cost of services sold and the allowable organization overhead under grants and contracts to be reimbursed to the municipality.

An accurate and reliable understanding of total cost and more specifically the indirect costs involved in the operation of any municipal department is a prerequisite for effective managerial decision making. [4] It is this area of indirect cost determination and allocation for internal financial management and for grants and contracts that will be the thrust of this thesis project.

B. OBJECTIVES

The objectives of this thesis are threefold. First, the primary objective is to assess the current state of the art in cost allocation methods for municipalities. The second objective is to provide a theoretical and practical means of identifying the indirect costs as distinguished from direct costs of operating municipal government departments and externally funded projects and programs. Ultimately the authors' goal is to develop a cost allocation

model/plan that is based on the current state of the art, yet simple and useable by municipal governments. The model will be developed to identify and allocate indirect cost for internal budgeting and accounting purposes, and be acceptable to State and Federal departments and agencies for recovery of indirect costs under grants and contracts. The model developed will be based on current cost accounting techniques for cost allocation.

C. GENERAL APPROACH AND METHODS

The authors' research in the areas of indirect cost determination and allocation consists of the following: 1. a review and presentation of current cost accounting literature providing the theoretical background of indirect cost pools, acceptable allocation bases (activity bases) and responsibility/program structure for cost centers; 2. a review of applicable Federal publications concerning cost principles for creating cost allocation plans and indirect cost rates and audit requirements for local governments receiving Federal assistance; and, 3. interviews and discussions with various municipal government officials within the state of California and officials of city leagues on a state and national level.

The research provided the authors with the data necessary to determine appropriate overhead items for the development of a cost allocation model to determine indirect cost rates for internal management and Federal/State grant

purposes. The assessment of the current accounting system of the City of Monterey, California with proposed changes provided a specific application of the cost allocation model developed. The model is based on the guidelines and principles of Federal Management Circular 74-4 "Cost principles applicable to grants and contracts with State and local governments" (FMC 74-4), Office of the Assistant Secretary of Health, Education and Welfare, Comptroller 10, "Cost principles and procedures for establishing cost allocation plans and indirect cost rates for grants and contracts with the Federal government" (OASC 10) and Office of Management and Budget Circular A-102, "Uniform Administrative Requirements for Grants-In-Aid to state and local governments" (A-102).

D. THESIS ORGANIZATION

The first chapter introduces a municipal cost allocation problem as seen by the authors and then discusses the objectives, approach and method used in the thesis effort.

Chapter II presents cost accounting theory for cost allocation; in particular, discussing direct and indirect cost, responsibility accounting, indirect cost elements and cost pools, and the facets of cost allocation including the concept of cost finding.

Chapter III discusses the cost principles of allowable costs under FMC 74-4 and other Federal guidelines for costs under grant programs including problems elicited during the recent FMC 74-4 conference sponsored by OMB.

Chapter IV introduces Cost Allocation Methods and illustrates several techniques for cost allocation. This chapter also presents the Cost Allocation plan for the City of Monterey, California for reimbursement of indirect cost under grant programs, through an indirect cost rate.

Chapter V discusses the audit requirements proposed in OMB Circular A-102 and their applicability to the City of Monterey and its Accounting System. This chapter will also provide an Audit Guide for grants management as an internal control management tool.

Chapter VI provides a summary of the information developed in the thesis and recommendations and conclusions concerning the authors' developed cost allocation technique and the effects it would have on the accounting structure of the City of Monterey, California.

II. COST ACCOUNTING THEORY FOR COST ALLOCATION

A. INTRODUCTION

Chapter II will provide a discussion of some basic concepts and ideas associated with cost allocation. The information presented represents an interpretation of theoretical material from the authors' research through available cost accounting texts and publications obtained from Federal, State and local governmental agencies. The material is presented in a manner, such that the cost accounting and cost allocation novice gains an understanding and a foundation for further study and expansion as needed to develop future cost allocation plans. The theoretical material presented in this chapter is integrated with references to a municipal government specifically the City of Monterey, California. This integration is provided to add emphasis where needed and to develop the ideas as applicable to the municipality of Monterey. Monterey, California is the organizational setting which is studied and which provides the accounting and statistical data utilized in developing the cost allocation plans to be presented in Chapter IV.

B. COST ACCOUNTING -- GENERAL

Eric L. Kohler, in A Dictionary for Accountants refers to cost accounting as:

> that branch of accounting dealing with the classification, recording, allocation, summarization, and reporting of current and prospective costs. Included in the field of cost accounting are the design and operation of cost systems and procedures; the determination of costs by departments, functions, responsibilities, activities, products, territories, periods, and other units, of forecasted future costs and standard or desired costs, as well as historic costs; the comparison of costs of different periods, of actual with estimated or standard costs, and of alternative costs; the presentation and interpretation of cost data as an aid to management in controlling current and future operations. [5]

This rather broad definition of cost accounting has been adapted, interpreted and modified for different purposes within the cost accounting literature. For example: John Dearden, in Cost Accounting and Financial Control Systems states,

> Cost Accounting is the branch of accounting designed to measure the economic resources exchanged or consumed in producing goods or providing services [6]

and in Governmental Accounting by Leon E. Hay and R. M. Mikesell cost accounting is defined as,

> that method of accounting which provides for the assembling and recording of all elements of cost incurred to accomplish a purpose, to carry on an activity or operation, or to complete a unit of work or a specific job. [7:670]

Although there may be varied opinion throughout the theoretical literature as to the precise definition and purpose of Cost Accounting there is general consensus as to the broad objectives of cost accounting. These are generally stated in the literature as: aiding management in the planning and control of routine and current activities; providing information to management for non-routine decision

making and the formulation of future plans and policies; and, providing information for external reporting to stockholders, taxpayers, government organizations and other outside parties.

1. Planning and Control

Within these objectives one finds the recurring theme of planning and control. Cost planning and cost control are two distinct functions of cost accounting. Cost accounting is useful in the areas of cost planning for pricing decisions on services provided and for budgeting of estimated future costs. In the area of cost control the role of cost accounting can be viewed from two perspectives; a. monitoring and checking cost performance with planned, budgeted or standard cost allowances; and, b. preventive control, that is motivating personnel to keep costs within plans or budget. This second notion represents a shift somewhat from the control of resources to the control of personnel to perform well, an idea associated with responsibility accounting which is discussed in Part C of this chapter.

2. Managerial/Financial Accounting

Cost accounting can also be considered as a merging of the principles, concepts and techniques of financial accounting and managerial accounting. In, Cost Accounting-Planning and Control, Adolph Matz and Milton Usry stated,

> Cost accounting, sometimes called management or managerial accounting should be the key managerial partner, furnishing management with the necessary accounting tools to plan and control activities. [1:9]

Based on the previously stated objectives, cost accounting is management accounting to the extent that it provides information to and aids management in its decision making process regarding current activities and future planning. Cost accounting is financial accounting to the extent that its product or service costing function provides information for internal management and for external reporting.

3. Summary

The major point of this general discussion of cost accounting is not to elaborate on the detailed concepts or techniques available through cost accounting nor is it an attempt to convert the reader to the cost accounting fold. The discussion is provided to elicit the idea that cost accounting as practiced today provides the manager with a means of dealing with current and future problems involving the planning and controlling of costs. In support of this; Hay and Mikesell in Government Accounting stated,

> the explosive increase in the demand for services, relative to the increase in resources has forced the adoption of techniques of good financial management, including cost accounting. [7:602]

The Cost Accounting literature provides very useful, practical and fundamental concepts and techniques for the allocation of costs to products or services or to other levels within the hierarchy of an organization. Some of

these concepts and techniques include the idea of direct cost and indirect cost, the determination of cost objectives, overhead departmentalization, indirect cost pools, allocation bases (activity bases), cost allocation methods and the determination of organization wide or departmental indirect cost rates. Each particular concept and technique previously stated will be defined and explored in the remaining sections of this chapter. Additionally other ideas not strictly cost accounting related are presented in order to develop a firm foundation in the uses of cost accounting and the development of a cost allocation plan.

C. CLASSIFICATION OF COST -- DIRECT AND INDIRECT

One of the many purposes of cost accounting is the classification of costs. A research committee of the National Association of Accountants in, Research Series No. 34 Classification and Coding Techniques to Facilitate Accounting Operations states:

> Classification is necessary to bring out the significance of information and is an essential step in the summarization of details. [8]

The committee defines classification as:

> The identification of each item and the systematic placement of like items together according to their common features. Items grouped together under common heads are further defined according to their fundamental differences. [8]

Cost classifications are necessary in the development of cost data for management for budgeting, cost control in responsibility accounting, measurement of income, establishment

of selling prices and pricing policies and furnishing relevant cost data for analysis in the decision making processes. The cost accounting literature provides several ideas with regard to classifying costs, for example, classifying by: 1. the nature of the item (rent, utilities, etc.); 2. their tendency to vary with volume or activity; 3. their relation to the products/services or object costs (direct or indirect); and, 4. their relation to the area of responsibility (production or service). Though this listing is by no means all inclusive; it does provide some basic method for attempting the organization, identification and classification of costs. The literature recommends that items be classified by one characteristic at a time; each item should fit into only one classification, that is, avoid overlapping classification; and a place should be provided for every item in a group to be classified. As a classification example the authors provide the notion of fixed cost versus variable cost, within a relevant range of activity fixed costs remain fixed and are so classified. Variable costs vary with the activity level (or within the allocation base chosen) and are so classified.

1. Cost Objective

The predominant classification of cost in regard to grants and contracts with the federal government is the classification by direct cost and/or indirect cost. Before one pursues the idea of the classification of cost as a direct cost or indirect cost the authors will introduce

the concept of object of cost or cost objective as it is currently used in cost accounting and in guidelines for costing under grants and contracts. Direct and indirect cost have no meaning except in relation to a cost objective. [9:30] The Cost Accounting Standards Board (CASB) in its efforts to provide uniformity and consistency in cost accounting principles promulgated rules, regulations and standards. Among those rules and regulations were definitions of terms to be used in the understanding and interpreting of standards.

The CASB defines cost objective as,

> A function, organizational subdivision, contract or other work unit for which cost data are desired and for which provision is made to accumulate and measure the cost of processes, products, jobs, capitilized projects, etc. [10:Par.4209]

FMC 74-4 introduced in Chapter I states:

> Cost objective means a pool, center, or area established for the accumulation of cost. Such areas include organization units, function, objects or items of expense, as well as ultimate cost objectives including specific grants, projects, contracts and other activities. [11:2]

The cost accounting literature subscribes to the definition as presented by the CASB and stresses the traceability or linking of costs to objects of cost as the essence of the distinction between direct cost and indirect cost.

2. Direct Cost

In Government Accounting by Leon E. Hay and R. M. Mikesell, direct cost, also known as direct expense, is defined as:

> those expenses which can be charged directly as part of the cost of a product or service, or of a department or operating unit, as distinguished from overhead and other indirect cost which must be prorated among several product or services, departments or operating units. [7:674]

In Cost Accounting - A Managerial Emphasis by Charles T. Horngren

> the word direct refers to the practicable obvious physical tracing of cost as incurred to a given cost object. [9:30]

CASB defines direct cost as,

> Any cost which is identifed specifically with a particular final cost objective. Direct costs are not limited to items which are incorporated in the end product as material or labor. Cost identified specifically with a contract are direct costs of the contract. All costs identified specifically with other final cost objectives of the contractor are direct costs of those cost objectives. [10:Par.4219]

The idea of direct cost as presented by these definitions can be summarized by remembering the previous idea of traceability. An example of direct cost is compensation of employees for time devoted to the execution of a specific activity or work in a specific department, the activity or department being the cost objective and the direct cost the compensation paid or provided. Another example of a direct cost would be the cost of materials acquired and/or expended specifically for the manufacturing of a product.

One point to keep in mind with regard to the idea of direct cost is that the level of assignment of the cost may complicate the pure distinction of direct cost. For example, a direct cost assigned to a particular responsibility or cost center may be an indirect cost with regard

to a number of various products/services or other outputs of that particular center. The term final cost objective may simplify the understanding of the level of assignment; final cost objective is the term used within the cost accounting literature of the CASB. A product or service is normally considered a final cost objective; however, the department within which the product or service is produced is or can be considered a cost objective. Essentially then one is describing a direct cost with regard to a final cost objective; its final point of accumulation for costing purpose. This can be a product/service or department/division or responsibility center within the organization depending upon the organizations needs and the structure of an existing Accounting System.

3. Indirect Cost

The idea of indirect cost is a little more complicated than that of direct cost. Gerald R. Crowingshield in Cost Accounting-Principles and Managerial Applications states,

> Indirect costs are those that are difficult or impossible to trace to a given segment. [12:15]

These costs are not directly identifiable with any particular segment of an organization but are incurred as a result of general operating activities. The CASB defines Indirect Cost as:

> any cost not directly identified with a single final cost objective, but identified with two or more final cost objective or with at least one intermediate cost objective. [10:Par.4239]

Indirect costs are incurred for a common or joint purpose benefitting more than one cost objective and are not readily assignable to a single cost objective directly benefitted. Indirect costs are allocated in order to be assigned to particular products, services, or segments (levels) of the organization. Managerial Accounting-Concepts for Planning Control, Decision Making by Ray H. Garrison provides the following guidelines in regard to distinguishing between direct and indirect cost:

> 1. If a cost can be obviously and physically traced to a unit of product or other organizational segments, then it is a direct cost with respect to that segment.
>
> 2. If a cost must be allocated in order to be assigned to a unit of product or other organizational segment, then it is an indirect cost with respect to that segment. [13:37]

Examples of indirect costs are salaries of supervisory personnel, depreciation on machinery and utilities costs.

Again, in discussing indirect cost one is confronted with the idea of level of assignment. An indirect cost at one level of the organization or in relation to a product or service may be a direct cost with respect to a higher level of assignment. In a manufacturing situation where the final cost objective is a unit of product the salary of the factory superintendent is an indirect cost of that product but a direct cost with respect to the factory superintendents

department. In a municipal government the salary of the City Manager is an indirect cost to the planning, police, or fire departments, a cost to be allocated, but it is a direct cost in the City Manager Department. In making these distinctions with regard to each element of cost involved, care should be taken to assign the cost as direct or indirect with respect to the final cost objective that has been previously determined and agreed upon by management.

Office of the Assistant Secretary of Health, Education and Welfare, Comptroller 10, "Cost Principles and Procedures For Establishing Cost Allocation Plans and Indirect Cost Rates for Grants and Contracts With The Federal Government" (OASC 10), introduced in Chapter I outlines this particular problem in stating:

> There is no universal rule for classifying certain cost as either direct or indirect under every accounting system. A cost may be direct with respect to some specific service or function but indirect with respect to a grant or other ultimate cost objective. It is essential therefore that each item of cost be treated consistently either as direct or an indirect cost. [14:33]

4. Summary

The CASB recognized the problem that could arise in the determination of direct and indirect cost when it published Cost Accounting Standard (CAS) 402: Consistency In Allocating Cost Incurred For The Same Purpose. Essentially this standard is interpreted as stating that if a cost is considered a direct cost for costing purpose in regard to cost objectives not relating to a government

contract, that same type of cost is to be considered a direct cost to a government contract for costing purposes. For example if travel expenses directly associated with a commercial contract are considered a direct cost of that contract then travel expenses directly associated with a government contract are to be considered direct cost of that government contract.

D. RESPONSIBILITY ACCOUNTING -- MISSION CENTERS/SUPPORT CENTERS

Any organization is, in its simplest form, a group of individuals moving toward a common purpose or objective; this idea forms the heart of responsibility accounting. Each individual within an organization who has control over cost or revenue can be considered a responsibility center whose performance of that responsibility must be clearly delineated, accurately measured and reported. Responsibility accounting is based on a classification of managerial responsibilities at each level in the organization for the purpose of establishing a budget. The individual in charge of each responsibility classification should be responsible and accountable for the expenses of his or her activities. The natural starting point for a responsibility accounting information system is the organization chart where the areas of jurisdiction have been determined.

This discussion of responsibility accounting introduces the idea of controllable and uncontrollable costs. At some

level within the organization all costs are controllable, however, all cost are not controllable at every level. In general, a cost charged directly to a department is controllable in or by that department. Many overhead items such as, office supplies and postage expense are charged directly to a department and are considered direct departmental overhead and the responsibility of that department. However allocated indirect or overhead costs from another department present a problem with regard to control or responsibility in the receiving department.

In order to determine the indirect cost rate of the receiving department these costs should be allocated so that full cost of a product/service can be correctly established or charged. The allocation is necessary to determine the full cost but may not be necessary for cost control. Control of the allocated cost should remain within the department from which the cost is allocated, a basic idea of responsibility accounting. [1:275] General operating expenses such as rent or utilities present a similar problem in regard to control or responsibility for those costs, however, all departments should share an equitable proportion of these costs based on some pre-established bases.

In most organizations it would be burdensome and impractical to consider each and every individual in the organization as a separate and distinct responsibility center. As previously noted the most logical starting point

for determining responsibility centers in an organization is with each entity's organization chart. The organization chart reflects areas of control, influence and responsibility that have been established based on the objectives of the organization. Each budget unit, department, cost center or cost objective is depicted based on the more or less specific function or activity it is responsible for performing in order to achieve the overall organizational goals or objectives.

1. Mission/Support Centers

It can be useful to classify these responsibility centers as either mission center or support centers. A mission center is a responsibility center whose output (product, service, grant program, contract, etc.) contributes directly to the objectives of the organization. A mission center receives allocations of cost from the center but does not allocate to them. A mission center is a cost center that exists principally to carry on the basic functions of the organization (city) and not to assist any of the other cost centers in carrying out their functions. In the municipal setting this interprets as providing direct service to the public rather than as support to other city cost centers (departments, etc.). [3:10]

A support center is a responsibility center whose output contributes to the work of other responsibility centers, which can be either mission centers or support

centers. It is a cost center created principally to support other cost centers, its output is one of the inputs of other cost centers. [3:10]

For cost allocation purposes it is necessary only to determine allocation base statistics for support centers. Since a mission center does not serve any other center it does not contribute to any other cost center's indirect costs.

The City of Monterey, California, is a municipality providing specified services and general government to the citizens of Monterey, California. Based on the authors' examination of the existing Monterey organizational structure and accounting information system and in concurrence with appropriate City officials, and in an effort to provide accurate cost data to support a departmental indirect cost rate ultimately to be developed, 20 responsibility centers were established; 12 support centers and eight mission centers. The 12 support centers can be further broken down into:

Service		Administrative
Personnel	Accounting	Mayor Council
Finance	Revenue	City Manager
Purchasing	Mechanical	City Clerk
Data Processing	Building Maintenance	City Attorney

This breakdown indicates the difference between measurable physical output (tangible) and policy guidance/management (intangible) support functions. Tangible support functions

as depicted under the service heading are more susceptible to logical and definitive allocation bases representing measurable output; for example, purchasing - purchase orders issued. Intangible support functions as depicted under the administrative heading require more arbitrary allocation bases not necessarily representative of the activity or service provided. Exhibits IV-2 and IV-9 describe the recommended bases for support centers. Exhibit II-1 of this chapter provides a chart of these responsibility centers separated as to Support and Mission. Exhibit II-2 provides a general description of the functions of each responsibility center. The grouping of responsibility centers as presented in this chapter is flexible and can be adjusted, altered, or increased in the future as necessary without changing the basic cost allocation procedures to be developed.

E. INDIRECT (OVERHEAD) COST ELEMENT IDENTIFICATION

One of the procedural steps in developing a cost allocation plan for an organization is the determination of the indirect cost elements that will be accumulated and pooled in order to be allocated from one department (support center) to another department (mission center) and ultimately totaled in order to determine indirect cost rates.

The term overhead is a more generalized term than that found by the authors in most cost accounting texts which

EXHIBIT II-1

CITY DEPARTMENTS

MONTEREY, CALIFORNIA

SUPPORT DEPARTMENTS/CENTERS

Mayor Council
City Manager
Personnel
City Clerk
City Attorney
Finance
Purchasing
Data Processing
Accounting
Revenue
Mechanical
Building Maintenance

MISSION DEPARTMENTS/CENTERS

Planning and Community Development
Police
Fire
Library
Public Facilities
Public Works
Parks and Recreation
Museum

EXHIBIT II-2

RESPONSIBILITY CENTERS AND FUNCTIONS

MAYOR-COUNCIL

(1) Legislation (Ordinances) Enactment
(2) Policy/Management Guidance
(3) Citizen Representation
(4) Review Ordinances, Resolutions, Municipal Matters

CITY MANAGER

General Administration

(1) Policy Analysis
(2) Direction and Coordination of Municipal Services
(3) Public Information
(4) Intergovernmental Relations
(5) Management Planning and Objective Determination
(6) Property Management

PERSONNEL

(1) Classification and Pay

    (a) Staff Allocation and Analysis

(2) Recruitment and Selection

    (a) Affirmative Action/EEO
    (b) CETA

(3) Labor Relations
(4) Administration of Benefits

    (a) Unemployment Insurance

(5) Safety and Training

CITY CLERK

(1) Council Support
(2) Records Management and Public Information
(3) Elections
(4) Central Services

    (a) printing
    (b) postage

EXHIBIT II-2 CONTINUED

CITY ATTORNEY

Legal Assistance

(1) Consultation
(2) Document Preparation
(3) Monterey Peninsula Transit Contract

Enforcement/Litigation

Public Information

FINANCE

Financial Control

(1) Budget
(2) Purchasing
(3) Property Management
(4) Financial Analysis & Control
(5) Risk Management

DATA PROCESSING

(1) System Design
(2) Operations

ACCOUNTING

(1) General Accounting
(2) Payroll Accounting
(3) Supplemental Benefit Administration

REVENUE

(1) Treasury Management
(2) Property Management
(3) Debt Management
(4) Budget

MECHANICAL

(1) Fleet Management
(2) Vehicle and Equipment Repair

(a) contract repair

EXHIBIT II-2 CONTINUED

(3) Preventive Maintenance

(a) contract maintenance

BUILDING MAINTENANCE

(1) Replacement & Repairs
(2) Preventive Maintenance
(3) Custodial
(4) Building Alterations
(5) Special Events

PLANNING AND COMMUNITY DEVELOPMENT

Advance Planning

(1) Plan Preparation

(a) General Plan
(b) Specific Plans
(c) Ordinances and Resolutions

(2) Development Review

(a) Growth Management
(b) Subdivision Ordinance
(c) Referrals
(d) Environmental Analysis

(3) Housing and Community Development

(4) Capital Improvements Program

(5) Staff Assistance - Outside Agency

(6) Public Information

(7) Research and Data Gathering

Current Planning

(1) Ordinance and Plan Implementation

(a) Zoning Ordinance
(b) Subdivision Ordinance

(2) Architectural Review

(3) Public Information

EXHIBIT II-2 CONTINUED

Building Inspection

(1) Code Enforcement
(2) Public Information
(3) Real Estate Inspection
(4) Housing Rehabilitation (H&CD)

POLICE

Uniform Services

(1) Patrol

* (a) Enforcement Actions (Includes Investigations and Traffic Investigations)
** (b) Beat Patrol

(i) downtown enforcement
(ii) balance of community

(2) Traffic

(a) Traffic Enforcement
(b) Abandoned Vehicle Abatement

Investigation/Apprehension

(1) Vice
(2) Narcotics
(3) Crime Against Property

(a) Burglary Prevention
(b) Balance of Crime Against Property

(4) Crime Against People

Special Services

(1) Animal Control
(2) Licensing
(3) Special Events

Support

(1) Records and Information Management
(2) Property and Evidence Control
(3) Jail

* out of car enforcement actions
** in car patrol

EXHIBIT II-2 CONTINUED

FIRE

Fire Suppression

Fire Prevention

(1) Inspection
(2) Plan Check
(3) Fire Investigation
(4) Public Education

Emergency Medical Response

LIBRARY

User Services

(1) Circulation
(2) Information Services
(3) Community Education

Support Services

(1) Selection, Acquisition, & Cataloging
(2) Collection Maintenance
(3) Historical Collection

PUBLIC FACILITIES

Conference Center Operations

(1) Events Operations
(2) Custodial Maintenance

Conference Center Marketing

(1) Direct Solicitation
(2) Advertising

Parking

(1) Enforcement
(2) Facility Maintenance
(3) Revenue Collection
(4) Wharf No. 1 Parking Control

PARKS AND RECREATION

Recreation

EXHIBIT II-2 CONTINUED

(1) Youth

(a) Sports
(b) Instructional Enrichment

(2) Teens

(a) Sports
(b) Instructional Enrichment

(3) Adult

(a) Sports
(b) Instructional Enrichment

(4) Seniors

(a) Social Events
(b) Instructional Enrichment

(5) Special Populations

(a) Social Events
(b) Instructional Enrichment

Parks

(1) Facility Design
(2) Maintenance

(a) landscape
(b) equipment
(c) forestry

(3) Special Events

Cemetery

(1) Internment & Arrangements

(a) burial
(b) crematory

(2) Perpetual Care
(3) Records & Sale of Lots

PUBLIC WORKS

Streets

EXHIBIT II-2 CONTINUED

(1) Street Maintenance
(2) Sewer Maintenance
(3) Storm Drain Maintenance
(4) Street Light Maintenance
(5) Tunnel Maintenance
(6) Sign & Vehicle Maintenance
(7) Special Events

Engineering

(1) City Project Design & Inspection
(2) Private Construction Review and Inspection
(3) Engineering Planning & Studies
(4) Staff Assistance - Outside Agency
(5) Maintenance of Maps, Records & Surveys
(6) Public Information
(7) Weed Abatement

Wharves

(1) Regulatory
(2) Maintenance & Repair

Marina

(1) Regulatory
(2) Maintenance & Repair
(3) Security Services
(4) Custodial

MUSEUM

(1) Collection Management

    (a) acqusition/registration
    (b) preservation

(2) User Assistance

    (a) collection exhibition
    (b) research

normally consider total production cost as the sum of direct material, direct labor and "manufacturing overhead" (factory overhead, indirect factory expense, etc.). Using the term overhead generalizes the concept beyond enterprises which are solely engaged in manufacturing activities. Overhead includes all costs except direct material and direct labor which cannot be traced to specific units of output or cost objectives in an organization.

Since this thesis deals with an organization not directly producing a manufactured product the term overhead or indirect cost will be utilized rather than factory overhead or manufacturing overhead as normally seen in cost accounting texts.

Historically overhead was considered an unfortunate addition to the cost of producing a product or service and at times was considered a nonproductive cost of an enterprise. [15:7-2] As organizations began to grow and become more complex with automation, large scale production, labor specialization and large capital investments there emerged a large unit of common costs classified as overhead. Lawrence L. Vance in the Theory and Technique of Cost Accounting summarized the impact of this evolution as:

> Overhead costs are as large as the cost of direct material and direct labor in many modern enterprises due to the use of elaborate and expensive equipment. The use of such equipment makes possible a large volume of production as a low cost per unit, but it also necessitates an accounting which may become very involved. [16]

This way of accounting is the accounting for common or overhead cost. This can also be applied to the municipal setting depicted in this thesis, since it too can grow larger and more complex as the demand for services increases.

1. Indirect Cost Elements

Overhead costs are generally grouped into three main categories; indirect material and supplies, indirect labor and other indirect costs. Indirect materials are materials associated with a manufacturing or production process which cannot be specifically traced to a unit of output (product/service). Indirect supplies and indirect materials are for the most part interchangeable terms, however, indirect supplies are generally considered items used to maintain the organization in working condition, such as lubricants for machinery and janitorial supplies for cleaning.

In many organizations, indirect labor forms a large portion of the labor costs and cannot be specifically traced to any particular unit of output or cost objective. Lang, McFarland and Schiff in Cost Accounting state:

> Indirect labor represents auxiliary work done in connection with product manufacture. It is labor not identifiable with the cost of a specific product, but which performs essential services. It includes all labor in service departments as well as auxiliary labor in producing departments. [17]

Two examples of the indirect labor idea in municipal government are: the finance director in the Finance Department (a support department) is an overhead cost

(indirect labor) to be allocated to the police or fire department (mission departments or producing departments), and the planning director in the Planning and Community Development Department (a mission department) is an overhead cost (indirect labor) in the Planning Department. Other costs included in indirect labor are costs commonly referred to as "labor-related cost." These costs include but are not limited to vacation and holiday pay, employers FICA tax, state and federal unemployment taxes, workmen's compensation insurance, pension cost, hospitalization benefits and group insurance. Although these costs when directly associated with direct labor should be added to direct labor, they are generally included in total overhead because it is often impractical to do otherwise. [1:239] Ultimately they become part of the organization or department overhead rates.

The last category of indirect cost is an extremely broad category termed "other indirect cost" which can be considered a (catchall) for costs not previously classed. John J. Neuner in Cost Accounting: Principles and Practice states that:

> this broad category consists of 1) maintenance; building machinery-equipment, 2) fixed charges; depreciation - rentals - insurance cost (non-personnel), 3) power, heat, light; fixed charges-supplies (operating), 4) special service department cost; accounting-purchasing-receiving; and, 5) sundry overhead expenses; interest on investment-special taxes- apportioned administrative expense. [18]

With the great variety of accounting systems in use and the large number of terms available to describe the same type of cost it would be practically impossible to precisely define generalized terms for all categories of overhead cost. This problem must be approached on a case by case basis basically utilizing the notion of traceability to a specific unit of output or cost objective.

Exhibit II-3 presents the Chart of Accounts for the City of Monterey, California as it currently exists and will serve as a basis for illustrating the principles discussed above. This chart of accounts lists the various categories of expense by object of expenditure classification but does not break out classification as either direct or indirect expenses. Some of the accounts listed can be immediately determined to be indirect expenses; however, each transaction must be classified for cost allocation purposes as either direct or indirect expense depending upon its accumulation in either a mission department or support department or its traceability to a specific unit of output or cost objective.

2. Overhead Departmentalization

The accumulation of cost in mission or support departments leads to a discussion of another topic in cost allocation, that is "overhead departmentalization." Overhead cost in total can be accumulated in many ways; two methods are organization wide (plant wide) or on a

EXHIBIT II-3

CITY OF MONTEREY

CHART OF ACCOUNTS

EXPENDITURES

100 Salaries and Wages

101 Full time
102 Overtime
103 Part time
104 Reimbursable extra duty
105 Uniform allowance
106 Cash in lieu of benefits
107 Holiday Pay

200 Materials, Supplies and Services

201 Office supplies
202 Office Equipment Maintenance (aka Equipment maintenance)
203 Printing and postage
204 Safety equipment
205 Operating supplies
206 Gas and oil
207 Vehicle paint and materials
208 Dues and publications
209 Conference and meetings
210 Car expense
211 Heat, light, power and water
212 Summer camp supplies
213 Advertising services
214 Maintenance buildings and grounds
214.1 Rental property repair
215 Mayor-council expense
216 Personnel recruitment
218 Municipal codes
219 Court costs and litigation fees
220 Contractual services
220.1 Rental equipment
221 Street tree planting
222 Training services
223 Parking meter supplies
225 Public safety services
226 Hydrant rental
227 Fire prevention
228 Alarm maintenance
229 Minor fire fighting equipment
230 Uniform clothing

EXHIBIT II-3 CONTINUED

231 Linen supplies
233 Rodent control
235 Traffic safety striping
236 Street lighting
237 Traffic signals
238 Street resurfacing
239 Traffic safety signs
240 Miscellaneous drainage - storm drains
241 Dredging
242 Structural repairs berthing facility
245 Plans checking
246 Insect control
247 Automotive supplies
248 Vehicle rental
249 Damage to city property
250 Structural repairs Wharf #1
251 Structural repairs Wharf #2
252 Structural repairs outer walls
253 Vaults and markers
254 Books and printed matter
255 Newspapers and magazines
256 Binding and rebinding
257 Films and microfilm
258 Phonograph records
260 Plans and surveys
261 Agricultural and botannical supplies
262 Launching ramp maintenance
263 Harbor boat maintenance
265 General street improvement engineering
266 Bond election
267 Municipal election
268 Street name signs
269 Weed abatement (or nuisance)
270 Substandard building abatement
296 Payment Marina State Loan #1
297 Payment Marina State Loan #2
298 Rental Southern Pacific property
299 MPC programs

400 Miscellaneous and Fixed Expense

401 Municipal promotion
405 Audit fees
406 Unemployment insurance
407 Pound services
408 Mosquito abatement
409 Refunds
410 Workmen's compensation insurance
411 Public liability insurance

EXHIBIT 11-3 CONTINUED

412 Fire, extended coverage and other insurance
413 Employees' health insurance
414 Retirement
415 Actuarial study
416 Salary continuation plan
417 Memberships
418 Collection costs
419 Employee optical insurance
420 Employees dental insurance
421 Property acquisition & appraisals
422 Dumping fees
423 Employee service awards
424 Communications
426 Physical fitness program

500 Equipment Outlay

501 Office
502 Field
503 Motive
504 Buildings
505 Other than buildings

department basis. Departmentalization of overhead means dividing the organization into units, segments or cost objectives called departments, cost centers or cost pools to which expenses are charged. This division of overhead into separate departments or cost objectives provides for more accurate costing of products/services and responsible control of department overhead cost. As a job/product/service passes through various departments, overhead is assigned to work done in a particular department utilizing the departmental overhead rate. The value of this operation may not be readily apparent to a municipal organization that does not deal in the manufacturing of a product; however there can be some value to departmentalization of overhead. For example, in program budgeting where two or more departments are involved in the operation of a particular program, each department can assign some of its overhead cost to its participation in the program thus providing a more accurate total cost of the program to the municipality.

As previously discussed under responsibility accounting, departments can be classified as either mission departments or support departments and these departments can then form the basic and initial structure for the accumulation of overhead. Support departments render a service to either other support departments or to mission centers. The unit of costing in this case would be the output/service of that department and all costs in the department are overhead costs.

In the authors' definition of mission center for a municipality, the mission center exists principally to carry out the basic functions of the organization. The unit of costing in the mission center can be either the output/service or the department.

In the case of department costing overhead costs would consist of direct departmental overhead accumulated within the department which is the responsibility of that department and indirect departmental overhead allocated to it from the support departments, based on the utilization of that support department services. The concept of overhead departmentalization facilitates the development of overhead cost rates in either support centers or mission centers.

F. INDIRECT COST POOL -- COST ALLOCATION BASE -- COST FINDING

In Cost Accounting: A Managerial Emphasis, Charles T. Horngren states:

> There are essentially three facets of cost allocation:
>
> 1) choosing the cost object, which is essentially an action. Examples are products, processes, or departments which are basically abbreviations for various action.
>
> 2) choosing and accumulating the cost that relate to the cost object. Examples are material, labor and overhead.
>
> 3) choosing a method for specifically identifying two with one. This usually entails choosing an allocation base (the cost function can then be determined). An example is the use of direct labor hours as an allocation base to apply various overhead costs to products. [9:396]

Choosing the cost object has been discussed previously in relation to direct and indirect cost; and, in the area of responsibility accounting in regard to mission centers and support centers. Choosing the costs that relate to the cost object was discussed in the previous section in reference to the identification of indirect cost elements. The discussion will now turn to the areas of accumulating the costs that relate to the cost object and the selection of allocation bases.

In the accounting literature the accumulation of overhead costs for allocation purposes is referred to as pooling. Based on the authors' research pooling is not the ideal method of assembling cost to be allocated to cost objects. To these authors the ideal methodology would be to take each cost in its basic form on a one by one basis and then allocate to cost objects over some acceptable or reasonable base which represents the beneficial or causal relationship between the cost and the cost object. Overhead pooling does not always imply that all cost incurred by the same department are included in the same pool. Different overhead pools within a department may be established based on the notion of homogeneity discussed in the next paragraph.

Homogeneity is an idea associated with indirect cost pools. This means that the costs included in the cost pool should bear the same relationship to each other such that when allocated as a total cost pool a significantly different

allocation will not result than if the included cost had been allocated separately. This concept of homogeneity in regard to indirect cost pools requires some explanation; for example, there are many types of insurance costs, which are indirect costs, such as building insurance and workmen's compensation insurance. These two costs should not be aggregated together and allocated because building insurance should be allocated over an asset valuation base and workmen's compensation insurance should be allocated over a personnel related base such as the number of employees or labor cost. Aggregation of these two costs and allocation over a single allocation base would cause significantly different results than if allocated separately.

Indirect cost pools can be assembled either as a specific department/division or as a specifically identified category of cost or cost element. For example the Finance Department of a city government is an indirect cost pool and the cost category workmen's compensation insurance can be an indirect cost pool.

For the development of a cost allocation plan under the guidelines of OASC 10 three primary indirect cost areas or pools are considered; Central Service Agencies, Non-Departmental Cost Areas, and Depreciation and Use allowances. [19:38] Central Service Agencies for the most part correspond to support centers providing supporting service such as data processing, purchasing and accounting. Non-Departmental Cost Areas are generally considered general operating

expense elements such as labor related cost, insurance, printing and postage. Depreciation and Use allowance is essentially depreciation on buildings, machinery or equipment. Use allowance is a term associated with allowable costs similar to depreciation where actual depreciation is not computed within the organization. [19:59] Depreciation and Use allowance will be further discussed in Chapter III of this thesis in reference to allowable and unallowable cost for grants and contracts with Federal agencies.

Although pooling is not the ideal method of cost accumulation for allocation purposes it is the methodology normally followed in cost accounting cost allocation and recommended by pertinent regulations and guidelines for establishment of indirect cost plans and indirect cost rates. The cost allocation plans developed in Chapter IV will utilize cost pooling.

1. Cost Allocation Base

The final area to be discussed in the three facets of cost allocation is the determination of specific relationships between costs and cost objects and the development of cost allocation bases.

As previously expressed the objective of cost allocation is to ultimately assign all costs incurred in an organization to a final cost objective which is normally a product or service but which can be a department. In the

case of a municipal organization as presented in this thesis one must be concerned with assigning all costs to mission departments.

This process is a two step process. The first step is the direct allocation of costs accumulated in indirect cost pools such as "labor related cost" and "other indirect costs"; those indirect cost that are not already directly traced to specific cost objectives (departments). These costs are those accounted for as Miscellaneous/Fixed expense or general operating expenses. The second step is to allocate the costs accumulated in the support departments (indirect cost pools also) to either other support departments or primarily to the organization mission departments. Both steps of the allocation process require the determination of cost allocation bases. The first step is called primary allocation and the second step secondary allocation. [15:8-1]

The primary allocation of specific costs, such as those included in categories such as Miscellaneous/Fixed expenses and general operating expenses, should be allocated on an equitable and practicable base; this is so that the allocation results in charges to each department that will be reasonable with reference to the benefit the department receives. For example, workmen's compensation insurance should be allocated to all departments on a number of employees or labor cost basis; communication expenses

(telephones) should be allocated on the number of telephone instruments; and building insurance should be allocated on a base representing the area occupied by each department in a building as a percentage total. The allocation is reasonable, equitable, and practicable to the extent that each department receives a benefit from or caused the incurred cost.

Exhibit IV-2 provides a partial listing of recommended allocation bases to be used in the allocation of these costs. In making the primary allocation of indirect cost the distinction between mission department and support department is not important. [15:8-5] However, in the secondary allocation this distinction is important for it is here that support department costs are allocated to the mission department. The primary philosphies in the secondary allocation is the basis of services rendered or the basis of readiness to serve. The basis of services rendered represents the relative amounts of benefits actually received or obtained from a support department: that is, the amount of output of the support department utilized by the mission departments. The basis of readiness to serve represents another point of view which observes that support departments must have a certain capacity in order to perform their functions. This capacity is determined by the demands that may be made upon them by the other departments. The capacity to serve can be allocated to other departments on the basis of their capacity to use defined services.

The CASB recommended the following hierachy of cost allocation bases as the best representation of the beneficial or causal relationship between an indirect cost pool and the benefitting cost objective: a measure of the resource consumption of the activities of the indirect cost pools (direct material, direct labor hours, labor cost, machine time, etc.); a measure of the output of the activities of the indirect cost pool (purchase orders, accounting transactions, printed data processing output); a surrogate that varies in proportion to the services received shall be used to measure resources consumed, generally, such surrogates measure the activity of the cost objectives receiving the service (machine time, direct labor hours, etc.); and, the ability to bear (sales revenue, budgeted expenses, actual expense).

These recommended measures generally represent the philosophy of secondary allocation. In any event these measures, to be applied reasonably and equitably to indirect cost pools, require the gathering of statistical data. The data is needed to support the allocation to mission departments and to withstand the scrutiny of auditors representing the interest of Federal agencies whose grant programs will support reimbursement for indirect cost.

2. Cost Finding

One final idea which is not generally discussed in the cost accounting literature is the notion of "Cost

finding." The general accounting system classifies and accumulates expenses along organizational lines by the departments responsible for their incurrence. This procedure, although critically important, makes no attempt to recognize the full cost of operating any particular organizational unit or department. The general ledger incorporates only the direct controllable expenses incurred by a particular department. The general ledger excludes the cost of services provided by one department to another; it also excludes any unassigned expense. The activity of cost allocation brings out these costs.

The development of this full cost information encompasses the procedure in which unassigned expenses (miscellaneous/Fixed or general operating) and the expenses of the support departments are allocated to mission departments of the organization. This procedure aids in the development of the full cost of providing various services to, in the case of this thesis, the general public. The procedure requires a viable organizational structure, adequate expense accounts and verifiable statistical data which reliably measures the amount of services provided by each support department. [20:436] This entire activity is performed apart from, but as a supplement to, the formal accounting system. The principles of cost allocation and the cost finding procedure have as their major objectives providing full cost data for use in development of user

fees, determining the amount of total reimbursable cost through indirect cost rate determination, and providing full cost information where relevant for financial decision making for management.

G. CHAPTER SUMMARY

Cost accounting provides useful concepts and techniques for the development of cost allocation plans for any organization. It is also an extension of the familiar disciplines of managerial and financial accounting. Classification of cost can be done in many ways and is an important first step in bringing out the significance of the cost information accumulated in the ledger accounts. The primary method of classifying cost for grant and contract purposes with the Federal government is as either direct or indirect cost, depending upon the traceability to a single cost objective or to more than one cost objective.

Cost objectives can be units of product or service or a departmental unit depending on the structure of the accounting system or the needs of management. Responsibility accounting suggests the idea of placing responsibility for the incurrence of cost at the point within the organization at which the cost can be or should be controlled. Responsibility accounting also introduces the notion of responsibility centers and provides a discussion and further breakdown of the organization structure into mission centers

and support centers. Mission centers exist to carry out the business of the organization and support centers exist to support the other support centers and mission centers.

After defining the organizations mission and support centers, the overhead cost elements which are to be allocated as part of the Cost Allocation Plan should be identified and accumulated within the mission and support center accounting structure. Basically these are indirect labor, indirect material and other indirect cost. This accumulation of overhead costs is termed overhead departmentalization. In assembling the overhead costs they should be aggregated into homogenous cost pools. Each cost in the pool should bear the same relationship to every other cost in the pool such that if allocated in total as a pool a different allocation would not occur than if allocated separately. The base over which each cost or each pool is allocated should be representative of a reasonable and equitable allocation with reference to the benefitting or causal relationship between the cost and the cost objective receiving the allocation.

The entire process of cost allocation represents a "cost finding," that is, assignment of unassigned expenses in the accounts and an allocation of support department cost to mission department so that an organization realizes the full cost of providing a product or service to its consumers.

The ideas and concepts presented in this chapter form part of the background and foundation for the development of the Cost Allocation Plans in Chapter IV. However, before developing those plans the authors present in Chapter III a discussion of the concept of allowability of cost in relation to grants and contracts with the Federal government.

III. ALLOWABLE COST ELEMENTS FOR GRANT PURPOSES

A. ALLOWABLE COST -- GENERAL

Chapter II discussed Cost Accounting theory as it applies to the allocation of cost. The classification of cost as direct or indirect was also discussed and it was noted that this was the predominant classification of cost in regard to grants and contracts with the federal government. The concepts of direct and indirect costs and allocation of those costs which were discussed in Chapter II are sufficient to develop a cost allocation plan for use by a Municipality to establish user fees or for internal management purposes. In order to develop a cost allocation plan to recover indirect costs associated with government grants and contracts the additional concept of allowability must be introduced. The allowability of cost is independent of whether or not the cost is direct or indirect. It is this concept of allowability for grant purposes that this chapter will explore.

The concept of allowability is "... not encountered outside of a regulated market place (such as Government contracting)." [21:244] The Cost Accounting Standards Board (CASB) does not define allowable cost but rather, defines unallowable cost as:

> Any cost which, under the provision of any pertinent law, regulation, or contract, cannot be included in prices, cost reimbursements, or settlements under a Government contract to which it is allocable. [22]

While standards promulgated by CASB do not apply to grants and contracts with State and local governments the cost principles in the opinion of these authors are essentially the same and represent generally accepted practices.

The discussion of allowability of cost, combined with the discussion of cost allocation in Chapter II will form the basis for the development of a municipal cost allocation plan in Chapter IV that will provide for the identification and possible recovery of the total costs associated with Federal and State grants. It should be noted again that allowable costs are those costs that are "eligible" for reimbursement under grants and contracts. [14:1] In some cases otherwise allowable costs may be disallowed totally, such as indirect costs or, in the case of pass through grants (grants that provide federal funds to local governments through a state agency), a State as the accountable entity may be more restrictive than federal regulations require. [23:11] It should therefore be recognized that while the following discussion of allowable costs is necessary for the development of a cost allocation plan for grants, the determination of whether a particular charge is allowable under a particular grant or by a specific agency or department, must be made on a case by case basis.

B. FEDERAL GUIDELINES/DIRECTIVES

Guidance as to the allowability of costs for grants and contracts is available from a variety of sources. The grant application or award normally includes guidelines

regarding the allowability of costs. Other sources of guidelines include the Federal Register and the Code of Federal Regulations. For non-educational and non-health care related grants there are three significant guides to refer to: 1. Federal Management Circular 74-4 "Cost principles applicable to grants and contracts with State and local governments" (FMC 74-4); 2. Office of Management and Budget Circular A-102, "Uniform Administrative Requirements for Grants-in-Aid to State and local governments" (A-102); and, 3. Office of the Assistant Secretary of Health Education and Welfare, Comptroller 10, "Cost principles and procedures for establishing cost allocation plans and indirect cost rates for grants and contracts with the Federal government" (OASC 10).

According to L. Michael Tompkins in The first... UNIVERSAL GRANTS MANAGEMENT HANDBOOK...in English, "...the vast majority of Federal grants are in complete accord with the provisions of [FMC] 74-7 [now A-102] even though they don't always know it." [24:19] The provisions of FMC 74-4 are identical to portions of the Defense Acquisition Regulations (DAR Sec. 15, part 7) and the Federal Procurement Regulations (FPR Part 1-15.7), both entitled "Grants & Contracts With State & Local Governments." [21:414]

FMC 74-4 is a key document in "...determining the allowable costs of programs administered by State and local governments under grants and contracts with the Federal

Government." [11:A-1] The principles contained in FMC 74-4 are intended to ensure that the Federal Government bears its "fair share" of the cost associated with Federal grants and contracts, unless the costs are prohibited or restricted by law.

FMC 74-4 is based on the following premises:

a. State and local governments are responsible for the efficient and effective administration of grant and contract programs through the application of sound management practices.

b. The grantee or contractor assumes the responsibility for seeing that federally assisted program funds have been expended and accounted for consistent with underlying agreements and program objectives.

c. Each grantee or contractor organization in recognition of its own unique combination of staff facilities and experience, will have the primary responsibility for employing whatever form of organization and management techniques may be necessary to assure proper and efficient administration. [11:A-1]

The grantee as noted above is responsible and accountable for grant funds. In the event that funds are lost or cannot be accounted for the grantee is not entitled to reimbursement. [25:No.859]

FMC 74-4 does not provide a definition of allowable or unallowable costs but rather, notes that the following criteria must be met for costs to be allowable:

a. Be necessary and reasonable for proper and efficient administration of the grant program, be allocable thereto under these principles, and, except as specifically provided herein, not be a general expense required to carry out the overall responsibilities of State or local governments.

b. Be authorized or not prohibited under State or local laws or regulations.

c. Conform to any limitations or exclusions set forth in these principles, Federal laws, or other governing limitations as to types or amounts of cost items.

d. Be consistent with principles, regulations, and procedures that apply uniformly to both federally assisted and other activities of the unit of government of which the grantee is a part.

e. Be accorded consistent treatment through application of generally accepted accounting principles appropriate to the circumstances.

f. Not be allocable to or included as a cost of any other federally financed program in either the current or prior period.

g. Be net of all applicable credits. [11:A-3]

FMC 74-4 does not contain a definition of what is a "general expense required to carry out the overall responsibilities of State or local governments." FMC 74-4 does define "supporting services," which are allowable, such as:

> auxiliary functions necessary to sustain the direct effort involved in administering a grant program or an activity providing service to the grant program. These services may be centralized in the grantee department or in some other agency, and include procurement, payroll, personnel functions, maintenance and operation of space, data processing, accounting, budgeting, auditing, mail and messenger service, and the like. [11:A-2]

As noted by James E. Kirk in Recovery of Local Overhead Incurred in Federal Grants, if the activities "...can be shown to benefit federal grant programs their costs are allowable as indirect costs." [19:4]

To the extent of benefits received, an allowable indirect cost is allocable to a particular cost objective.

[11:A-3] This restriction along with the requirement that costs "be necessary and reasonable for...the grant program" effectively means that "there must be a traceable relationship between the cost objective (the grant being accounted for) and any costs being allocated [to it], directly or indirectly." [21:416] This "traceable relationship" is somewhat more restrictive than that for contracts between the Federal government and non-government entities where the allocation of corporate home office expenses, which is analogous to "general expense," is specifically allowed. [21:416]

The requirement that costs "be net of applicable credits" means that the grantee must offset or reduce expense items that are allocable as either direct or indirect costs to grants. Included in the definition of applicable credits are: purchase discounts, allowances or rebates, sales revenue from publications, scrap or equipment, adjustments to account, any payments with Federal funds or depreciation or use allowance associated with items financed or donated by the Federal government. Applicable credits must be considered when seeking actual reimbursement or fulfilling matching requirements.

Appendix A is Attachment B of FMC 74-4 and is also included in OASC 10. Appendix A shows the allowable, allowable contingent upon grantor agency approval and unallowable costs. Subsequent to the issuance of FMC 74-4

and OASC 10 travel cost for the offices of chief executives and legislative bodies has been determined to be allowable, if specifically related to grants. Interest expense associated with the acquisition of publicly owned buildings, occupied on or after October 1, 1980 is also allowable. Unless authorized by law no other interest expense is allowable. [23:24]

As noted in part A of Appendix A the principles contained therein are applicable regardless of whether the costs are classified as direct or indirect. Even though some costs may be allowable according to Appendix A and not prohibited by law some agencies will not authorize reimbursement of indirect costs. [2:45] A thorough review of the grant provisions and discussions with grantor agency personnel should clarify any ambiguous areas.

Notwithstanding an individual agency's reluctance to accept indirect costs the keys to the allowability of cost shown in Appendix A are: 1. are they reasonable? 2. are they necessary to carry out grant purposes? and, 3. can they be documented? [2:112] This will be discussed further in Chapter V which discusses audit requirements. There are some areas however that warrant further discussion at this time.

Generally the expenses of the City Council, Mayor's office or the Tax Collector would be unallowable since they are clearly a general expense of government and do not

provide a benefit to a grant program. The Accounting department on the other hand is essential for the proper accounting of grant funds and a portion of the cost to operate that department is allowable and can be included in a cost allocation plan or charged directly to the grant depending on the accounting system.

Appendix A, para. B.10 notes that compensation for personal services are allowable costs and requires that amounts to be charged to grants be based on payrolls documented and approved in accordance with the generally accepted practice of the State or local agency. Time distribution records are required where the salaries and wages of employees are chargeable to another cost objective or more than one grant. Failure to document the time spent on grant projects may result in an unallowable cost. [25:No.824]

Depreciation and use allowances are allowable charges (Appendix A para., B.11) but most government entities do not depreciate their assets. The authors attended a financial management seminar in December 1980, sponsored by the League of California Cities during which it was noted that in California there is increasing pressure due to Propositions four and 13 to determine the full costs of various services, including depreciation. FMC 74-4 does not prescribe any one method of depreciation but whatever method is selected must be applied consistently to a particular asset or class of assets.

A use allowance may be computed in lieu of using depreciation. For buildings the use allowance is two percent of the acquisition cost and for equipment it is six and two-thirds percent. If warranted, assets which are considered fully depreciated may still have a use charge negotiated. For a municipal government that operates in buildings that were donated or that may be fully depreciated this can be of some benefit. As noted above, any portion of the acquisition cost funded by the Federal government must be excluded prior to the computation of depreciation or a use allowance. Capital improvements or other capital outlays should be added to the appropriate asset account for calculation of depreciation or a use allowance.

Fringe benefits, as noted in Appendix A are also allowable. For personnel who are grant funded the fringe benefits "should always be charged as direct costs to grants." [19:40] As noted in Chapter II care must be taken to ensure that costs charged directly to a final cost objective, for example fringe benefits to a grant program, are not also included in a indirect cost pool that is to be allocated. Such "double-dipping" is unallowable.

As noted in Section C of Appendix A the cost of automatic data processing services is allowable. The cost may include rent or depreciation on grantee owned equipment. The acquisition of data processing equipment to be used solely for grant purposes requires specific approval by

the grantor in advance. The cost of the services would also include personnel costs as well as the cost of software. The cost of software, i.e. the computer programs, should be amoritized over some period of time rather than treated as a one time expense item.

C. PROPOSED CHANGES

On May 7, 1979 the Director of Office of Management and Budget (OMB) issued a memorandum to heads of executive departments and agencies regarding the Financial Priorities Program which aims "...to resolve the major financial issues facing the government today." [26] One of the top nine Financial Priorities was the "full implementation of cost principles," including FMC 74-4 and standard administrative requirements, A-102. As a part of the Financial Priorities Program, OMB, along with the Municipal Finance Office's Association's International Career Development Center sponsored a conference entitled "Accounting for Federal Aid: FMC 74-4." During the conference, which took place on February 28 and 29, 1980 in Washington, D.C. concerns were voiced by State and local governments representatives in attendance regarding allowable and unallowable costs.

Among the concerns raised were: 1. administrative costs were eliminated as being unnecessary, 2. some States do not allow recovery of indirect costs, 3. some Federal agencies do not allow indirect costs. [23:10] Additional areas of concern were: 1. the unallowability of interest

and the normal cost of government, and 2. the treatment of depreciation or use allowance. [2:47]

Subsequent to the conference, OMB amended FMC 74-4 to allow interest cost associated with public buildings. The travel costs by elected officials when such travel was directly associated with grants was also determined to be an allowable item. [23:24] OMB has also promised to establish a number of work groups to address the various concerns voiced at the conference with the anticipation of "comprehensive revisions to the cost principles" and the reissuance of FMC 74-4 as OMB A-87. [23:25]

It appears unlikely that the issue of allowing interest, beyond that already allowed, will be resolved in the near term. James R. Doyle of OMB's Financial Branch has stated that:

> ...considerably more analysis will be necessary in order to assess the additional cost to the Federal government. [25:No.828]

Another area of concern to the State and local representatives at the conference was a lack of consistency on the part of Federal agencies and States as to the application of the principles of FMC 74-4. As noted above some States do not recognize indirect costs at all for Federal grant funds that are "passed through" the states to the local governments. [2:28]

A significant aspect of the Conference on FMC 74-4 was the opening of channels of communication between the

local, State and Federal participants. [27:160] Certainly no quick or easy solution to the problems and concerns expressed are to be expected. The establishment of work groups to explore ways to modify FMC 74-4 in order to alleviate the concern is a major step but not one that would have timely results. Mr. Richard Hite of OMB did note that in the event that the State and local agencies could not reach agreements with a particular Federal agency regarding grants that it would be appropriate to contact Intergovernmental Affairs Division in OMB. [27:145]

Mr. John Lordan, Chief of the Financial Management Branch of OMB, in the closing session of the conference noted that in summary, what had been requested was "...a measure of consistency, inter-regional consistency, a measure of fairness in the program, a measure of timeliness. Those are all things that Federal agencies are capable of resolving." [27:146]

D. CHAPTER SUMMARY

This chapter introduced the concept of allowable cost; a term that is unique to a regulated market place. The preparation of a cost allocation plan to identify the costs that are "eligible" for reimbursements under a contract or grant with the Federal government requires that allowable cost be determined.

Information regarding the allowability of costs are available from several sources in addition to the actual

contract or grant documentation. Three of the most significant additional sources are FMC 74-4, A-102 and OASC 10. Appendix A lists costs that are allowable, allowable with grantor consent and unallowable. The Appendix does not and is not intended to list all allowable or unallowable costs. The grantee, at all times, is responsible for, and accountable for Federal funds received. Funds which cannot be accounted for or which were spent in an authorized manner are unallowable, i.e. not eligible for reimbursement.

The principles of cost allocation discussed in Chapter II coupled with the principles regarding allowable cost discussed in this chapter will form the basis for the development of a cost allocation plan in Chapter IV. This cost allocation plan will provide for the identification of costs that are "eligible" for reimbursement. Once it is developed, the use of the plan will be demonstrated using actual data from the City of Monterey, California.

IV. COST ALLOCATION DATA REQUIREMENTS, METHODS AND MODELS

A. INTRODUCTION

Chapter II discussed theoretical cost accounting material as a foundation for the development of overhead cost allocation plans for internal municipal management and for reimbursement of eligible costs under grants or contracts. Chapter III added to that discussion with the introduction of the concept of cost allowability peculiar to the realm of grants and contracts with the Federal government. This Chapter develops overhead cost allocation plans for internal municipal management and indirect cost rate proposals for grant/contract reimbursement.

As stated earlier the overhead cost allocation plans developed are applicable to municipal governments and specifically reference the City of Monterey, California. The authors' extensive research in Monterey involved understanding the organization of the City, its accounting system, particularly various fund accounts, the services provided within the organization and to the citizen of Monterey, California. Additionally, the authors attempted to fully understand the limitations that the organizational structure, the accounting system and service pattern statistics would present in developing the overhead cost allocation plans needed by the City Management.

The authors firmly believe that fundamental concepts are vital in the introduction phase of a city overhead cost allocation plan and will present information and techniques such that this thesis will be a foundation upon which City Management can expand their overhead cost allocation needs.

B. DATA REQUIREMENTS

The general ledger expenditure accounts as presented in the Report of Expenditures - Departmental and Program Accounts provide the source of all costs experienced by a city such as Monterey. This report presents the appropriations (budget), expenditures to date, encumbrances and balances in all accounts by department for the City of Monterey. The term department includes operating departments (mission and support centers) and also various funds that have been established by the City for special accounting purposes. In fund accounting terminology this departmental accounting scheme can be broken down into two areas, the governmental fund (general fund) and proprietary funds (enterprise funds). The general fund departments are basically all the operating departments of the City (such as Finance, Police, Public Works, etc), and are normally funded through tax revenues. Enterprise fund departments are special operating categories established to be self-supporting entities (such as Parking, Marina, Cemetery). For purposes of this thesis, overhead cost allocation plans

will be developed for the general fund departments, however, expansion to other funds is possible utilizing the techniques that will be employed for the general fund.

In the case where one fund pays an expense of another it is necessary to add or subtract that expense to or from the correct fund before attempting to allocate the overhead cost pool to defined cost objectives. Since the City is on a modified accrual basis accounting system the concepts of expenditure and expense should be discussed.

Expenditures should be converted to expense so that actual expenses form the pool of cost to be allocated within the plan. Anthony and Herzlinger in Management Control in Non-Profit Organizations state:

> Expenditures measure the resources acquired during the period, as contrasted with expenses which measure the resources consumed or used during the period. [28:196]

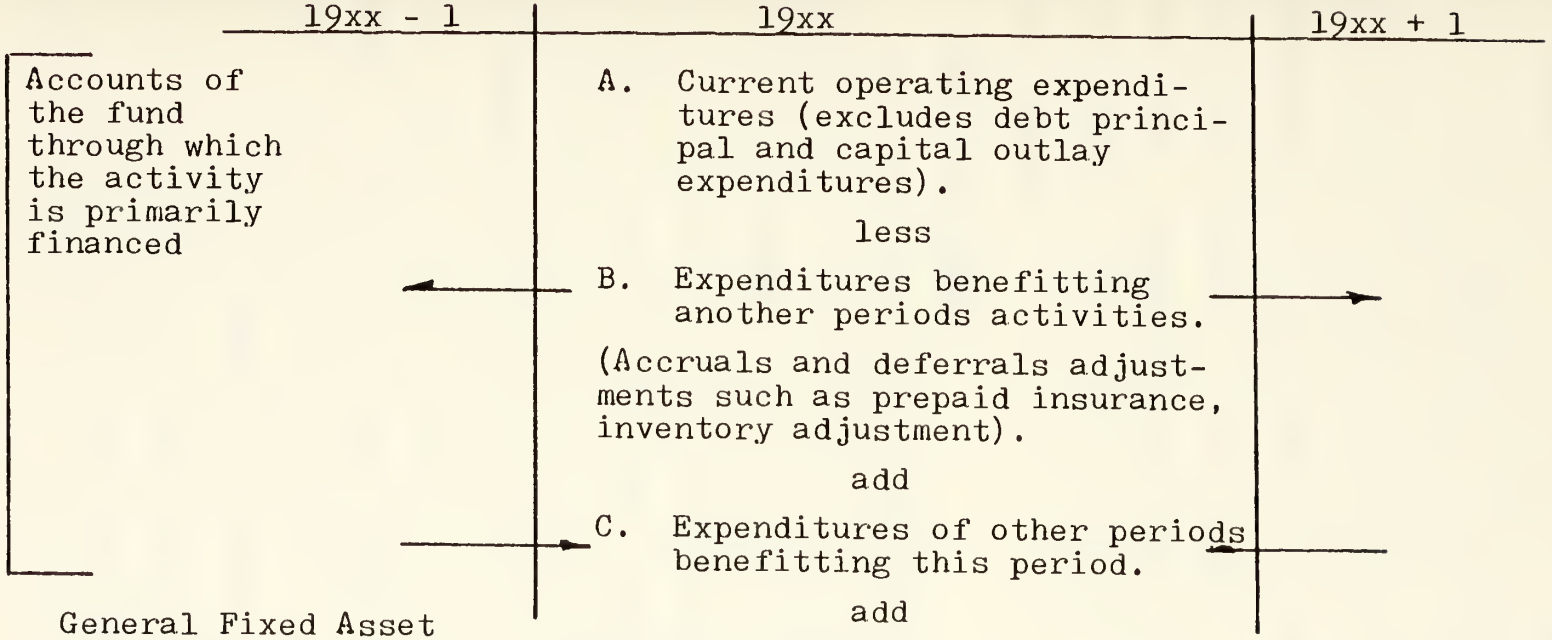
Exhibit IV-1 is a graphical presentation of the methodology of converting expenditures to expenses for expendable funds (general fund).

1. Actual Expenses VS Budgeted Expenses

In accumulating the overhead costs in cost pools to be allocated the authors' research through cost accounting theoretical material revealed the use of both budgeted expenses for future periods and actual expenses of prior periods in development of cost pools and overhead application rates. Depending upon the activity level between

EXHIBIT IV-1

METHODOLOGY OF CONVERTING EXPENDITURES TO EXPENSES (EXPENDABLE FUNDS)


19xx - 1
19xx
19xx + 1
Accounts of the fund through which the activity is primarily financed
A. Current operating expenditures (excludes debt principal and capital outlay expenditures).
less
B. Expenditures benefitting another periods activities.
(Accruals and deferrals adjustments such as prepaid insurance, inventory adjustment).
add
C. Expenditures of other periods benefitting this period.
add
General Fixed Asset Records
D. Depreciation.
add
Debt service, other funds
E. Other activity expenses financed through another fund.
TOTAL COST OR EXPENSE

Source:
Edward S. Lynn and Robert J. Freeman, Fund Accounting: Theory and Practice Prentice-Hall, 1974, p. 647.

periods use of budgeted versus actual may result in different allocations and thus different overhead rates. Federal guidelines recommend, and in the case of local governments, require the use of actual expenses of prior periods in accumulating costs in cost pools to be allocated. [14:14] Actual overhead expenses of prior periods as accumulated in general fund departments will be used in the development of overhead cost allocation plans in this chapter. The plans will allocate only the actual expenses considered indirect/overhead, that is those expenses which benefit or are caused by more than one cost objective.

2. Cost Objectives

The structure of the organization and the current accounting system are sufficient to proceed to the next step in the development of the plans. Chapter II discussed the term cost objective and introduced the idea of responsibility center, mission center and support center. As all costs experienced by the City are accumulated, they should be concurrently accumulated by the cost objective. A cost objective can be a unit of service, a product or a department/center. Since it is often difficult for an organization such as a municipality to accurately measure or define its output that is, as a product or service the term cost objective here refers to a department/center.

As it currently exists the accounting system of the City of Monterey accumulates the costs both direct and indirect

by department/cost objective. These cost objectives have been broken down into two categories, mission centers and support centers.

Exhibit II-1 presented the breakdown as determined by the authors in consonance with City Officials. Further breakdown within the category of mission centers is possible and potentially very useful especially to the level of specific programs such as a Youth Program in the Parks and Recreation Mission center. Since costs are currently not accumulated to that level of activity, cost allocation to that level will not be attempted but only to the level of the department/mission center.

Accumulation of cost in specific cost objectives, namely mission centers and support centers, is necessary so that the overhead expenses of the support center can be allocated to the mission centers. Mission center direct departmental overhead cost will be combined with the allocated support department overhead in order to form the cost pool necessary to determine the indirect/overhead cost rate as part of the full cost of the mission department.

3. Statistical Survey--Allocation Bases

Prior to the mathematical mechanics of the cost allocation and ultimate determination of a mission center/cost objective/department indirect cost rate statistical information relating the cause and effect of the cost incurrence should be gathered. Essentially this means

developing, through research and investigation, logical and reasonable bases for the allocation of all indirect costs incurred in the organization. As discussed in Chapter II this is necessary for the primary allocation of those costs caused by, or benefitting, all departments, and secondary allocation of support department costs to mission departments. The allocation is made to the extent that the mission department cause or benefit by the cost incurred in the support departments. This involves a survey of the organization's facilities and records to determine equipment quantity and valuation in each department; utilities utilization/consumption in each department; number of employees; labor cost and effective labor hours per department; asset valuation; square footage occupied or controlled by departments; and, an evaluation of the function performed by each support department. The survey will allow one to determine the most equitable, reasonable and logical bases for allocating support department expenses to mission departments.

Exhibit IV-2 provides a table of recommended allocation bases for allocation of certain costs to all departments and for the secondary allocation of support department cost to mission departments. The information presented in Exhibit IV-2 is not all inclusive; however, any cost incurred that is allocable, that is, it benefits more than one cost objective, can be allocated through statistically determining the cause and effect relationship between the cost and the cost objective.

EXHIBIT IV-2

SUGGESTED ALLOCATION BASES

Type of Service/Cost	Suggested Bases for Allocation
Accounting	Number of transactions processed.
Auditing	Direct audit hours.
Budgeting	Direct hours of identifiable services of employees of central budget.
Buildings lease management	Number of leases.
Building maintenance	Direct labor hours, square foot space occupied
Data processing	System usage.
Disbursing service	Number of checks or warrants issued.
Employees retirement system administration	Number of employees contributing.
Insurance management service	Dollar value of insurance premiums.
Legal services	Direct hours.
Mail and messenger service	Number of documents handled or employees served.
Motor pool costs including automotive management	Miles driven and/or days used.
Office machines and equipment maintenance repairs	Direct hours.
Office space use and related costs (heat, light, janitor services, etc.)	Sq. ft. of space occupied.
Organization and management service (Policy guidance)	Direct hours.
Payroll services	Number of employees.
Personnel administration	Number of employees.
Printing and reproduction	Direct hours, job basis, pages printed, etc.
Procurement service (Purchasing)	Number of transactions processed.
Local telephone (Communications)	Number of telephone instruments, dollar value of telephone service

EXHIBIT IV-2 CONTINUED

Type of Service/Cost	Suggested Bases for Allocation
Health services	Number of employees
Fidelity bonding program	Employees subject to bond or penalty amounts.
Central payments	Factor on which payments based.
Residual costs (reasonable, equitable base indeterminable)	Total cost input.
Labor related cost	Departmental payroll.

Source: Office of the Assistant Secretary of Health, Education and Welfare, Comptroller, "Cost Principles and Procedures For Establishing Cost Allocation Plans and Indirect Cost Rated For Grants and Contracts With The Federal Government" (OASC-10).

Exhibit IV-3 of this chapter provides an author developed elementary step by step procedure that can be followed in the development of a cost allocation plan and the determination of mission departments' indirect cost rates. This procedure will be expanded and utilized in the development of an example based on actual data for the City of Monterey. However, before developing the actual plans for both internal management and for use in grants and contracts with the Federal government one additional topic will be explored, that is, various overhead allocation methods/models.

C. ALLOCATION METHODS -- MODELS -- ILLUSTRATED

Allocation of overhead costs to mission/support department/centers can be accomplished in a number of ways, the four general models are:

1. Direct allocation;
2. Single Step allocation;
3. Double Step allocation;
4. Reciprocal allocation.

Each method employs different computations and provides different values of results. As discussed in part B of this chapter, all methods require clearly defined cost objectives (mission center/support center/programs, etc.), accurately accumulated costs by cost objective and carefully considered and selected basis for allocation of costs to cost objectives. The basis for allocation of cost may be as simple as a subjective estimate by a responsible person within the organization or as detailed as an extensive statistical survey.

EXHIBIT IV-3

OVERHEAD COST ALLOCATION STEPS

1. Record all cost incurred by organization according to Chart of Accounts.

2. Determine Cost Objectives

Organization Level	Output Level
cost center	product
mission/support center	service

3. Classify cost within cost objective as direct/indirect.

4. Identify elements of cost for inclusion in indirect cost pools.

5. Gather statistical information from survey of organization facilities, records, and service functions for primary allocation to all departments of certain costs and secondary allocation of support department cost to mission departments.

   For Example:
   Primary Allocation - Utilities Costs - Square Footage
   Secondary Allocation - Accounting Division - Number of Accounting Transactions Processed

6. Develop worksheets for allocation of costs based on included costs, statistical information by department and method of allocation (direct, single step, reciprocal) chosen.

7. Perform mathematics of cost allocation procedure (method) (i.e., primary allocation and secondary allocation)

8. Accumulate within mission centers departmental indirect costs and allocated indirect cost.

9. Divide costs accumulated in step eight by base in mission department which reflects the overall activity level of that mission department (direct labor hours, labor cost, machine hours, etc.)

The authors feel that since the allocation of cost is greatly influenced by the base selected the only criteria should be that care and informed judgement be employed in the decision.

Primary allocation of certain costs (general and administrative, miscellaneous/fixed, central payments) is normally accomplished first utilizing a base which represents the factor upon which the payment is based or caused the expense. Secondary allocation is accomplished utilizing one of the four methods indicated above.

1. Direct Allocation

Direct allocation is widely used and the simplest form of cost allocation. [4:3] The cost of the support centers are directly allocated only to the mission centers. The allocation is based either on managements estimates of services provided to mission departments or on data derived from statistical surveys. This method does not consider the mutual provision of services to other support centers. Exhibit IV-4 is an example of the direct allocation method of overhead cost allocation.

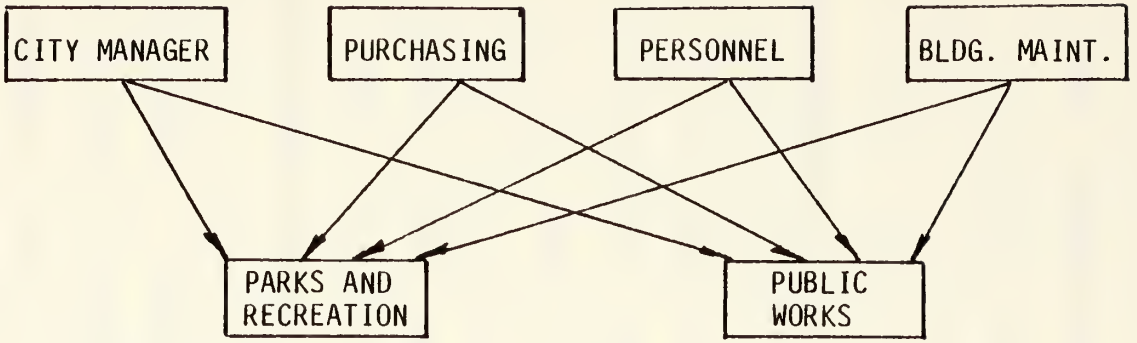
2. Single Step Allocation

Single step allocation is an improvement upon the direct allocation method and is used by many business enterprises. [9:420] This methodology represents an improvement in that it recognizes an allocation of some costs from support departments to other support departments. However, because of the sequence of cost allocation made some

EXHIBIT IV-4

DIRECT ALLOCATION
(DATA ASSUMED)

SUPPORT CENTERS



MISSION CENTERS

DIRECT ALLOCATION

	OVERHEAD EXPENSE	(%)	CITY MGR.	(%)	PURCH.	(%)	PERSONEL	(%)	BLDG MAINT.	TOTAL OVERHEAD EXPENSE MISSION DEPARTMENTS
CITY MANAGER	100000		100000							
PURCHASING	85000				85000					
PERSONNEL	125000						125000			
BLDG. MAINT.	330000								330000	
PARKS &RECREATION	200000	(50)	50000	(50)	42500	(75)	93750	(50)	165000	551250
PUBLIC WORKS	200000	(50)	50000	(50)	42500	(25)	31250	(50)	165000	488750
		(100)	100000	(100)	85000	(100)	125000	(100)	330000	1040000

reciprocal cost are not recognized. The sequence generally begins with the department which renders the greatest number of services to other support departments and continues in a step by step method completing the allocation with the department rendering the least amount of service to other departments. Once a support departments cost have been reallocated, no subsequent support department cost are recirculated back to it. [9:420] Exhibit IV-5 is an example of the single step-down method of cost allocation.

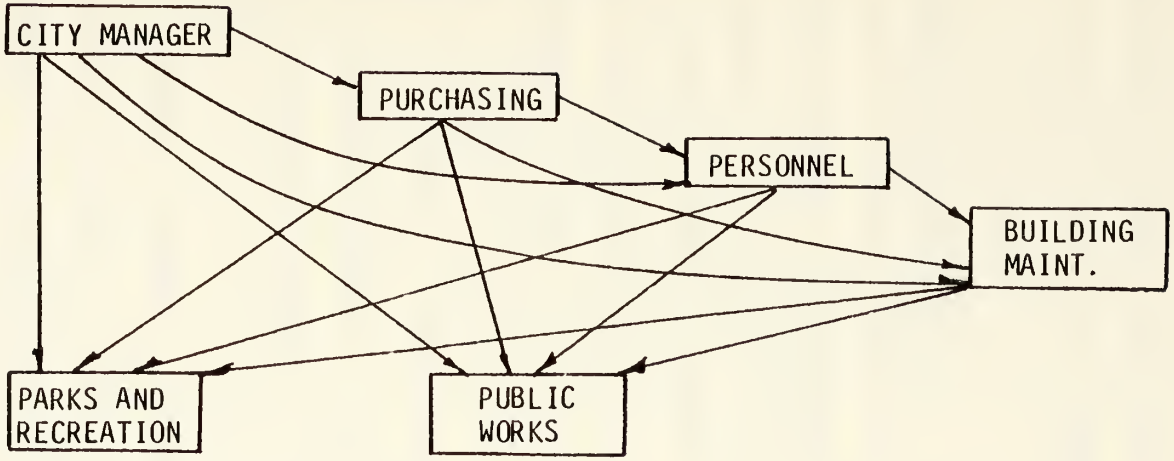
3. Double Step Allocation

The double step allocation represents an improvement and refinement of the single step method, by allowing recognition of interdepartmental charges between support/service departments. [4:5] Two allocations are made, first indirect cost of all departments are distributed to appropriate cost centers whether they have been previously allocated or not. These cost are separately accumulated. In the second step, the accumulated expenses of the support department from the first step are reallocated in manner identical to the single step allocation method. The double step allocation represents an improvement in that it recognizes the allocation of interdepartmental charges, however it does not recognize the case where some costs of a department are within that department. (There is some purchasing cost involved in running the purchase department). [4:5] Some difference in the amount of cost allocated to a particular mission department does occur

EXHIBIT IV-5

SINGLE STEP DOWN ALLOCATION (DATA ASSUMED)

SUPPORT CENTERS



MISSION CENTERS

SINGLE STEP DOWN ALLOCATION

	OVERHEAD EXPENSE	(%)	CITY MGR.	(%)	PURCH.	(%)	PERSONEL	(%)	BLDG MAINT.	TOTAL OVERHEAD EXPENSE MISSION CENTERS
CITY MANAGER	100000		100000							
PURCHASING	85000	(10)	10000		95000					
PERSONNEL	125000	(13)	13000	(10)	9500		147500			
BLDG. MAINT.	330000	(35)	35000	(40)	38000	(30)	44250		447250	
PARKS &RECREATION	200000	(21)	21000	(25)	23750	(50)	73750	(50)	223625	542125
PUBLIC WORKS	200000	(21)	21000	(25)	23750	(20)	29500	(50)	223625	497875
	1040000	(100)	100000	(100)	95000	(100)	147500	(100)	447250	1040000

between the single and double step allocation method. However, the difference may be insignificant for pricing or financial decisions, and the added cost of preparing the more complicated double step method may not equal the benefit derived. Exhibit IV-6 is an example of the double step down method of cost allocation.

4. Reciprocal Allocation

The reciprocal method is a means of allocating cost using linear algebra (simultaneous equations). It provides greater exactness in the recognition of interdepartmental charges, especially when reciprocal service between supports department are significant and when management intends to use the results of cost allocations for significant financial decisions or product pricing and lease-buy.

The mechanics of reciprocal allocation are best described using an example. Exhibit IV-7 is an example of the reciprocal allocation method of cost allocation. This example is simplified due to the numerous computations required as additional support centers and additional simultaneous equations are developed. This methodology is highly adaptable to computer solution and with the large number of equations required computer solution almost becomes mandatory. Due to the complexity of this methodology its use is rare in practice. Results using the simpler methods of cost allocation should be periodically checked against the more complex simultaneous equation method to determine

EXHIBIT IV-6

DOUBLE STEP DOWN ALLOCATION
(DATA ASSUMED)

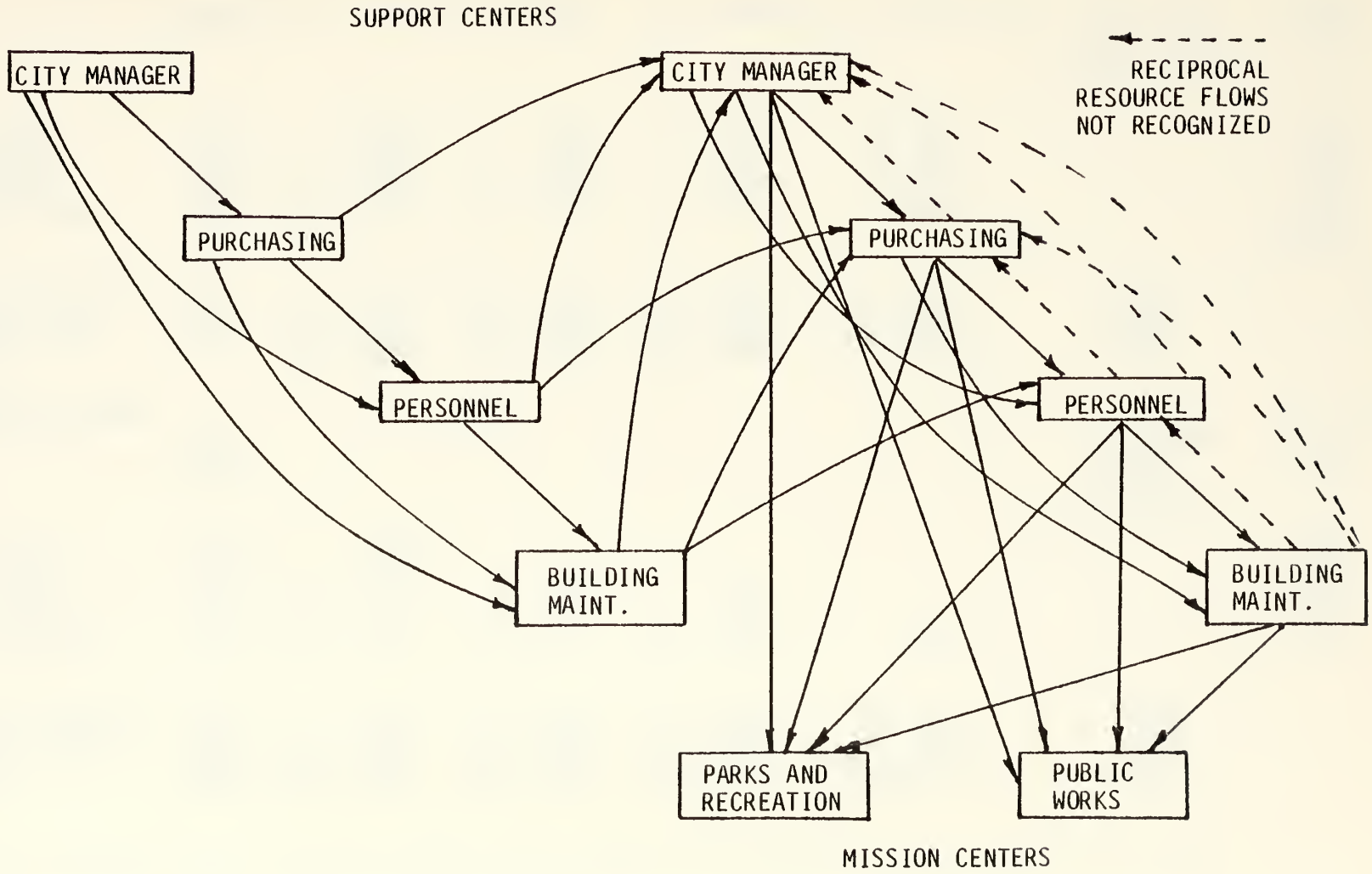


EXHIBIT IV-6 CONTINUED

DOUBLE STEP DOWN ALLOCATION

	OVERHEAD	(%)	CITY MGR.	(%)	PURCH.	(%)	PERSONNEL	(%)	BLDG. MAINT.	FIRST STEP OVERHEAD EXPENSE MISSION DEPT.	ACCUM. EXPENSE
CITY MGR.	100000		(100000)	(13)	11050	(10)	12500	(20)	66000		89550
PURCHASING	85000	(10)	10000		(85000)	(5)	6250	(5)	16500		32750
PERSONNEL	125000	(13)	13000	(8)	6800		(125000)	(5)	16500		36300
BLDG. MAINT.	330000	(35)	35000	(33)	28050	(25)	31250		(330000)		94300
											252900
PARKS &RECREATION	200000	(21)	21000	(23)	19550	(45)	56250	(35)	115500	412300	
PUBLIC WORKS	200000	(21)	21000	(23)	19550	(15)	18750	(35)	115500	374800	
TOTALS		(100)	100000	(100)	85000	(100)	125000	(100)	330000	787100	

SECOND STEP DOWN

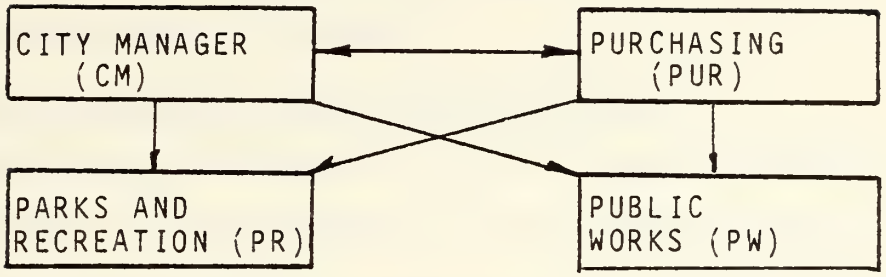
	ACCUM. EXPENSE									TOTAL MISSION OVERHEAD EXPENSES	TOTAL FLOW THRU *
CITY MGR.	89550		89550								189550
PURCHASING	32750	(10)	8955		41705						126705
PERSONNEL	36300	(13)	11645	(10)	4171		52116				177116
BLDG. MAINT.	94300	(35)	31345	(40)	16682	(30)	15635		157962		487962
PARKS &RECREATION	412300	(21)	18803	(25)	10426	(50)	26058	(50)	78891	546568	
PUBLIC WORKS	374800	(21)	18802	(25)	10426	(20)	10423	(50)	78891	493432	
TOTALS	1040000	(100)	89550	(100)	41705	(100)	52116	(100)	157962	1040000	

*TOTAL FLOW THRU IS EQUAL TO THE DIRECT EXPENSE FOR A CENTER PLUS THE EXPENSES ACCUMULATED DURING THE FIRST STEP.

EXHIBIT IV-7

SIMULTANEOUS EQUATIONS

SUPPORT CENTERS



MISSION CENTERS

DEPARTMENT	DEPARTMENTAL OVERHEAD BEFORE DIST.OF SUPPORT DEPT. $	SERVICE PROVIDED % DEPT. : CM	PUR
MISSION-PR	200000	40	50
MISSION-PW	200000	40	20
SUPPORT-CM	100000	-	30
SUPPORT-PUR	85000	20	-
TOTAL	585000	100	100

EQUATIONS:

CM = 100000 + .3 PUR
PUR = 85000 + .2 CM

SUBSTITUTING:

CM = 100000 + .3 (85000 + .2 CM)
CM = 100000 + 25500 + .06 CM
.94 CM = 100000 + 25500
CM = 125500 ÷ .94 = $133510

PUR = 85000 + .2 (133510)
PUR = 85000 + 26702
PUR = $111702

DISTRIBUTION OF OVERHEAD:

	MISSION PR	MISSION PW	SUPPORT CM	SUPPORT PUR	TOTAL
OVERHEAD BEFORE DIST. OF SUPPORT DEPT.	200000	200000	100000	85000	=585000
DISTRIBUTION OF:					
SUPPORT-CM	53404	53404	(133510)	26702	
SUPPORT-PUR	55851	22314	33510	(111702)	
TOTAL MISSION CENTER OVERHEAD	$309255	$275745			$585000

whether significant differences occur. If significant differences do not occur and decisions are not sensitive to the results of the complex methodology, then simpler methods are adequate. [9:420]

5. Full Allocation or Partial Allocation

Resolving the question of which choice of alternative, full or partial cost allocation is the responsibility of the organization management, management must be fully aware of the potential influences the choice will evoke.

The question of full allocation or partial allocation of costs remains unanswered even in the authoritative cost accounting literature. Full allocation of cost makes department managers aware of the support from many parts of the organization needed to maintain an individual responsibility center running efficiently. Partial allocation of cost recognizes the point that some costs bear no cause effect relationship to cost objectives and are outside the control of managers to whom the costs are allocated. The question may be resolved only to the extent of determining the behavior management desires to influence by a choice of alternative.

Full allocation of costs may influence price setting, efficiency and expansion. Full allocation may also cause underutilization of necessary services due to their costing to receiving departments.

Partial allocation may perpetuate the notion of "free" services causing managers to demand too much of a service or influence the behavior, i.e., reducing morale, in the department which provides the "free" service.

D. COST ALLOCATION PLAN--CITY OF MONTEREY, CALIFORNIA -- INTERNAL MANAGEMENT

This section of Chapter IV develops the recommended Cost Allocation Plan of the City of Monterey for internal management. The section relies heavily on exhibits within the chapter and the appendices to the thesis in developing the plan.

Appendix B is the extract of expenses by operating departments from the Report of Expenditures--Departmental and Program Accounts (7/1/79-6/30/80). This Appendix separates expenses within departments as direct cost or indirect cost.

The totals of indirect cost within departments are presented on line one of Appendix C, the worksheet for primary allocation of certain costs (Miscellaneous and Fixed) to all departments. Exhibit IV-8 is a summary of costs to be allocated to all departments, costs accounted for as central payments in Miscellaneous and Fixed (Dept. 17).

Exhibit IV-9 is a presentation of all bases utilized in the allocation of costs for both primary and secondary allocation. The statistical data supporting each base is presented in Appendix D. This statistical data represents

EXHIBIT IV-8

SUMMARY OF COSTS TO BE ALLOCATED
TO ALL DEPARTMENTS
(Primary Allocation)

Expense Account[1]	Amount	
406 Unemployment Insurance (U.I.)	$ 4,627.00	
410 Workmens Compensation Insurance (W.C.I.)	312,114.00	
411 Public Liability Insurance	175,000.00	
412 Fire, Extended Coverage and Other Insurance	88,781.00	
413 Employer Health Insurance (H.I.)	174,612.00	
420 Employer Dental Insurance (Dent.)	35,981.00	
419 Employer Optical Insurance (Opt.)	13,043.00	
416 Salary Continuation Plan (S.C.)	25,931.00	
414 Retirement and Actuarial Study (Ret.)	744,528.00	
423 Employer Service Awards	2,319.00	
424 Communications Expense	67,121.00	
220 Contractual Service (Radio System)	59,438.00	2
211 Heat-Light-Power-Water	---	
- Other (Audit, Contributions, etc.)	18,266.00	
422 Dumping Expense	4,699.00	3
407 Pound Services	306.00	3
408 Mosquito Abatement	2,324.00	3
409 Refunds	499.00	3

Notes:

[1] Departments wherein an expense under listed accounts was already lodged received no additional allocation of expense from amount column.

[2] See Appendix C.

[3] Expense placed directly in a department and not allocated to all depts (422 to Depts. 25-31 and 35-37, 407 to Dept. 22, 408 to Dept. 25-31, and 409 to Dept. 4).

EXHIBIT IV-9

EXPENSE ALLOCATION BASES

Primary

Expense/Cost Pool	Base Used
Unemployment Insurance	Number of Employees
Workmens Compensation Insurance	Employee Labor Cost
Public Liability Insurance	Square Footage
Fire, Extended Coverage and Other Insurance	Assets Valuation
Employee Health Insurance	% of Employee Participating
Employee Dental Insurance	% of Employee Participating
Employee Optical Insurance	% of Employee Participating
Salary Continuation Plan	% of Employee Participating
Retirement and Actuarial Study	% of Employee Participating
Employee Service Awards	Number of Employees
Communications Expense	% of Average Annual Billing
Contractual Service (Radio system)	Number of Employees
Heat-Light-Power-Water	Square Footage
Other	Size-Based on Appropriated Budget

Secondary

Mayor-Council	Accumulated Cost
City Manager	Accumulated Cost
City Clerk	Accumulated Cost
City Attorney	% of Staff Time
Finance Admin	Accumulated Cost
Revenue	Budget Appropriations
Accounting	Number of Transactions
Building Maintenance	Number of Square Feet

estimates provided by key members of the city organization and actual research conducted by the authors over a six month period of time.

Utilizing the statistical data accumulated and the allocation bases selected the authors performed the primary allocation of costs listed in Exhibit IV-8. For example, unemployment insurance totalling $4627 was allocated to all departments on the base - number of employees. The City Manager department had 2.2 percent of the total number of employees (Appendix D), it therefore received (4627 x .022) $102 allocated expense. (Appendix C) This allocation procedure was done for all departments and for all costs listed in Exhibit IV-8. All primary allocated costs from Exhibit IV-8 and the indirect cost from Appendix B were totaled on the worksheets in Appendix C and now represent the internal overhead within departments prior to secondary allocation. Exhibit IV-10 provides a summary of the indirect (overhead) expenses and direct expenses from Appendices B and C.

As discussed earlier, the next step after completion of the primary allocation is the secondary allocation of support department costs to the mission departments. The method of allocation chosen was direct allocation for three reasons; 1. it is the simplest methodology, 2. it is the method which most closely conforms to the consolidated central services cost allocation plan described in the Office of the Assistant Secretary Health, Education and Welfare, Comptroller, "Cost

EXHIBIT IV-10

SUMMARY SHEET

	Support Departments	Indirect Expense	Direct Labor	Direct Labor Fringe Benefits	Other Direct Expense
1	Mayor-Council	8,850			
2	City Manager & (Personnel)	255,471			
3	Finance/Admin.	60,589			
4	Finance/Revenue	102,130			
5	Finance/Accounting	113,895			
6	City Clerk	87,516			
19	Printing (No Allocation)	17,543	8,413	3,635	13,846
7	City Attorney	102,679			
8	Mechanical (No Allocation)	29,698	96,452	31,868	155,628
32	Building Maintenance	269,314			
	Mission Departments				
9	Planning & (Building Inspection)	133,710	214,178	57,623	188,155
22	Police	563,925	1,000,544	292,079	37,734
23	Fire	329,191	865,849	247,860	31,988
38	Public Facilities (Conference Ctr)	181,179	115,600	37,711	248,402
25-31	Public Works	150,670	483,965	154,458	468,329
35-37	Parks & Recreation	137,386	357,292	131,110	278,033
34	Library	189,303	179,543	70,735	88,574
39	Museum	3,998	15,456	6,070	7,349

NOTE: Indirect Expense includes Indirect Labor and Indirect Labor, Fringe Benefit and Other Indirect Costs within the department.

DATA SOURCE: Derived and Report of Expenditures - Departmental and Program Accounts for period 7/1/79-6/30/80 - Fiscal Year 80 - City of Monterey, Ca.

Principles and Procedures for Establishing Cost Allocation Plans and Indirect Cost Rates for Grants and Contracts with the Federal Government," (OASC-10) and, 3. the desires of the City of Monterey management to have a simple methodology of determining the full cost of City (general fund) operations. Other methodologies were explained in section C of this chapter. This was done to make clear the need to be flexible in selecting the method that will render the most useful information.

Utilizing the bases described in Exhibit IV-9 and the statistical data from Appendix D the support department overhead cost was directly allocated to each of the mission departments. Exhibit IV-11 is a summary of the allocations of support department cost made to the mission departments. Once these allocations were completed the columns were totaled to provide the total Mission Department overhead which consists of internal overhead and allocated support department overhead.

The final mathematical computation presented is the determination of an appropriate departmental overhead rate. This was accomplished by dividing the total departmental overhead by the total direct labor cost within the department (the predominant activity base of the department). For example, the rate for the planning department indicates that for every direct labor dollar incurred an additional $1.07 should be applied to cover overhead costs.

EXHIBIT IV-11

SUMMARY SHEET COST ALLOCATION PLAN

INTERNAL AND DEPARTMENTAL OVERHEAD RATE

	PLANNING	POLICE	FIRE	PUBLIC FACILITIES	PUBLIC WORKS
OVERHEAD BEFORE ALLOCATION OF SUPPORT DEPARTMENTS	133710	563925	329191	181179	150670
SUPPORT DEPARTMENTS					
MAYOR-COUNCIL	700	2954	1724	949	789
CITY MANAGER	20208	82276	49791	27386	22788
FINANCE ADMIN	4792	20225	11808	6495	5404
REVENUE	8109	25451	19527	10407	19323
ACCOUNTING	8519	10581	9590	19772	22039
CITY CLERK	6922	29212	17057	9382	7806
CITY ATTORNEY	40260	30187	5031	5031	5031
BUILDING MAINT.	6868	16805	28090	133203	23430
TOTAL SUPPORT DEPT. OVERHEAD COST ALLOCATED	96378	220691	142618	212625	106610
TOTAL DEPT. OVERHEAD AFTER ALLOCATION OF SUPPORT DEPARTMENTS	230088	784616	471809	393804	257280
ALLOCATION BASE: DIRECT LABOR	214178	1000544	865849	115600	483965
OVERHEAD RATE	1.07	.78	.54	3.41	.53

EXHIBIT IV-11 CONTINUED

	PARKS AND RECREATION	LIBRARY	MUSEUM	TOTALS
OVERHEAD BEFORE ALLOCATION OF SUPPORT DEPARTMENTS	137386	189303	3998	1689362
SUPPORT DEPARTMENTS				
MAYOR-COUNCIL	719	992	21	8850
CITY MANAGER	20769	28638	613	255471
FINANCE ADMIN	4925	6792	145	60589
REVENUE	12061	6894	368	102130
ACCOUNTING	20968	21105	1333	113895
CITY CLERK	7115	9811	210	87516
CITY ATTORNEY	10073	5031	2012	102679
BUILDING MAINT.	38162	19525	3205	269314
TOTAL SUPPORT DEPT. OVERHEAD COST ALLOCATED	114792	98788	7907	1000409
TOTAL DEPT. OVERHEAD AFTER ALLOCATION OF SUPPORT DEPARTMENTS	252178	288091	11905	2689771
ALLOCATION BASE: DIRECT LABOR	357292	179543	15456	3232427
OVERHEAD RATE	.71	1.60	.77	.83

E. COST ALLOCATION PLAN--CITY OF MONTEREY, CALIFORNIA -- GRANTS

A government agency that wishes to charge support service costs to Federal grants and contracts must first prepare a central service cost allocation plan to allocate the central service costs to those departments or units which they benefit. [14:6] Local governments such as the City of Monterey, California, receive the only exception to this requirement in that they may prepare a consolidated central service cost allocation plan in lieu of preparing both a central service cost allocation plan and indirect cost proposal. The indirect cost rate developed using the consolidated plan will be lower than a rate developed using the more extensive central service cost allocation plan. This is due to the fact that the consolidated plan does not recognize the recovery of overhead costs within the various departments. The consolidated central service cost allocation plan considers only cost allocated to departments from central services (support departments). It is for this reason that the authors will demonstrate the Consolidated Central Service Cost Allocation plan and the more extensive indirect cost rate proposal using the Short Form method described in OASC-10.

Again, this section of Chapter IV will rely heavily on the exhibits and appendices to the thesis to present the Consolidated Central Service Cost Allocation plan and an indirect cost rate proposal for the Planning Department,

City of Monterey. The Planning Department was selected since it is currently involved in a Housing and Community Development (HCD) grant. The rate developed will be compared to the earlier developed rate.

Exhibit IV-12 is a worksheet recommended for the development of the Consolidated Central Service Cost Allocation plan. [19:67] The form is divided into three sections: 1. the indirect cost pool, which is the central service departments of the organization, also included in this section is the use allowance, a term previously described, for the central service departments buildings and/or equipment; 2. the indirect cost base, these are the mission departments of the organization who benefit from the support provided by the central service departments, also included in this section are the central service department costs which are determined to be unallowable and interest expense or debt service; and, 3. the computation of the indirect cost rate.

Section one column one contains the total indirect cost within each central service (support) department and the use allowance pertaining to those departments (Exhibit IV-10). In section one column two the unallowable costs as discussed in Chapter III are displayed. In the case presented, the unallowable costs are the office of Mayor-Council, Revenue Department, advertising services and contributions expenses. Column three of section one is the result of subtracting the unallowable cost from the total indirect cost, that is, the

EXHIBIT IV-12

CONSOLIDATED CENTRAL SERVICE ALLOCATION PLAN AND INDIRECT COST RATE PROPOSAL
CITY OF MONTEREY, CALIFORNIA (FISCAL YEAR 1980)

	TOTAL	UNALLOWABLE COST	INDIRECT COSTS	DIRECT COSTS SALARIES & WAGES	DIRECT COSTS ALL OTHER
INDIRECT COST POOL					
MAYOR-COUNCIL	8850	8850			
CITY MANAGER	255471	240	255231		
CITY CLERK	87516	9695	77821		
CITY ATTORNEY	102679	97	102582		
FINANCE ADMIN	60589	57	60532		
ACCOUNTING	113895	107	113788		
BUILDING MAINT.	269314	253	269061		
REVENUE	102130	102130			
USE ALLOWANCE	2562		2562		
			881577		
INDIRECT COST BASE					
PLANNING DEPT.	459956			214178	245778
POLICE DEPT.	1330357			1000544	329813
FIRE DEPT.	1145697			865849	279848
PUBLIC FACILITIES	401713			115600	286113
PUBLIC WORKS	1106752			483965	622787
PARKS & RECREATION	766435			357292	409143
LIBRARY	388852			179543	159309
MUSEUM	28875			15456	13419
MAYOR-COUNCIL	8850				8850
REVENUE	102130			63335	38795
NON-DEPARTMENTAL (OTHER)	10449				10449
DEBT SERVICE- G.O.B.	31056				31056
				3295762	

INDIRECT COST RATE = 881577 ÷ 3295762 = .267

allowable indirect costs. This column is now totaled and represents the numerator for the indirect cost rate computation.

Section two column one is the total of all direct costs within each mission department and the costs eliminated as unallowable from the indirect cost pool (section one). Column four of section two is the direct salaries and wages within each mission department (see Exhibit IV-10). Column five represents all other direct costs including the direct labor fringe benefits. The figures in column four and five when totaled by department should equal the total in column one of section two. The figures in column four representing the total direct labor salaries and wages by department are now totaled to yield the total direct labor cost within the indirect cost base and this figure becomes the denominator for the computation of the indirect cost rate.

Section three is the indirect cost rate computation. The total allowable indirect cost is divided by the total direct labor cost to yield an indirect cost rate. This rate is utilized by the grantee organization to determine the overhead to be applied to grants or contracts for every direct labor dollar eligible for reimbursement. Using the more extensive central service cost allocation plan and indirect cost rate proposal it is possible to determine a higher indirect cost rate than is derived from the Consolidated plan.

Exhibit IV-13 is a worksheet devised by the authors to describe the Indirect Cost Rate proposal-Short Form Method for the Planning Department, City of Monterey, California.

EXHIBIT IV-13

PLANNING DEPARTMENT
INDIRECT RATE PROPOSAL--SHORT FORM METHOD
FISCAL YEAR 1980

	TOTAL COST INCURRED	UNALLOWABLE COST	DIRECT COST SALARIES & WAGES	DIRECT COST OTHER COSTS	INDIRECT COST
DEPARTMENT DIRECT	459956		214178	245778	
DEPARTMENT INDIRECT	133710				133710
CENTRAL SERVICE COST					
MAYOR-COUNCIL	700	700			0
CITY MANAGER	20208	30			20178
FINANCE ADMIN	4792	7			4785
REVENUE	8109	8109			0
ACCOUNTING	8519	13			8506
CITY CLERK	6922	1210			5712
CITY ATTORNEY	40260	12			40248
BUILDING MAINT.	6868	32			6836
			214178		219975

INDIRECT COST RATE = 219975÷214178 = 1.02

This worksheet consists of two sections: 1. the allocation plan; and, 2. the indirect cost rates determination. Section one column one displays the total direct departmental expense, the total departmental indirect expense (see Exhibit IV-10) and the Central Service Department costs (support departments) allocable to the Planning Department (see Exhibit IV-11). Column two displays the unallowable costs as discussed in Chapter III. In this case the unallowable costs are; the office of the Mayor Council, the Revenue department, advertising expenses within the City Clerk department and contributions expense. Column three is the direct labor cost and column four all other direct cost including direct labor fringe benefits, these figures from Exhibit IV-10. Column five is the allowable indirect cost derived by subtracting the unallowable cost from the department indirect cost and from the allocated central service cost.

Section two is the indirect cost rate computation. The indirect cost rate is determined by dividing the total allowable indirect cost by the total direct labor cost. In the case of the Planning department this rate is $1.02. This rate represents the overhead cost to be applied to grants and contracts for every direct labor dollar eligible for reimbursement.

This rate should be higher than the consolidated central service plan indirect cost rate for two reasons: 1. it takes into consideration internal department overhead;

and, 2. by developing this rate department by department instead of aggregating totals of all departments as in the consolidated plan the effects of low overhead departments are excluded. Whether the rate developed using this method (Short Form) is higher or lower than the Consolidated Central Service Plan should be determined on a department by department basis such as was done for the planning department. The $1.02 rate is lower than the rate developed in the internal cost allocation plan (Exhibit IV-11) due to the consideration of unallowable cost in the plan for reimbursement of cost through grants or contracts with the Federal government.

There are three additional methodologies of developing indirect cost rate proposals for grants and contracts with the Federal government. Appendix E of this thesis is Appendix 1 of OASC-10 and the additional methods indicated above are described and illustrated therein. Additionally, Appendix 1 of OASC-10 (Appendix E) describes certain schedules and exhibits which support any cost allocation plan prepared by a local government for submission to a federal agency. The schedules are self explanatory and do not impact the accuracy of the cost allocation plans developed. The additional indirect cost rate proposal methodologies provide for more detailed cost determination, detail which is beyond the current City of Monterey accounting system. The two methods presented in the text are acceptable to the Federal government for cost reimbursement purposes.

F. CHAPTER SUMMARY

The goal of this chapter has been to provide the City of Monterey, California with a methodology to determine the indirect cost of operating the general fund departments. In knowing the indirect cost and combining that information with the direct cost of operation the City should be in a better position to; determine the full cost of operating various departments; determine use or service fees; and, obtain reimbursement of indirect costs from grants or contracts. The data requirements of these cost allocation plans are the determination of the direct and indirect costs of each department and statistical information to support primary allocation of certain costs to all departments and secondary allocation of support department costs to mission departments.

There are several methods of cost allocation including; direct, single-step, double-step and reciprocal each of which represents an improvement upon the preceding. A consideration in choosing the method to be employed in any cost allocation plan should be a determination of whether a more complex methodology is of greater benefit than the cost of implementing that method. If not, a simpler method may be appropriate.

Section D presents the recommended cost allocation plan for the City of Monterey for internal management purposes providing the step by step process through supporting exhibits

and appendices. Departmental overhead rates are determined for each of the mission departments. Using the data developed by the internal cost allocation plan and with the introduction of the concept of allowability a consolidated central service cost allocation plan and indirect cost rate proposal was developed for the City of Monterey to use in the recovery of indirect cost under grants and contracts with the Federal government. Additionally, an indirect cost rate proposal was developed for one city department using the Short Form method discussed in OASC-10.

A final point in summary to this chapter with relation to cost allocation plans developed for recovery of indirect cost under grants or contracts. The grantee should be able to adequately substantiate through the accounting records the charging of direct cost to grants and charging of indirect costs through allocation to the extent the indirect cost benefit the grant. Chapter V addresses this situation to the extent that the grantee should maintain auditable accounting records sufficient to withstand the scrutiny of audit representatives of the grantor agency.

V. AUDIT GUIDE AND REQUIREMENTS

A. AUDIT--GENERAL

In Chapters II and III the concepts of cost allocation and allowable costs were discussed. These concepts were then used to develop a Cost Allocation Plan (Model) in Chapter IV. The Cost Allocation Plan for use by a municipal government to establish user fees or provide for better internal management is subject to some review by the Mayor/City Council and some affected citizens. The Cost Allocation Plan for development of a indirect cost rate for reimbursement under a Federal grant is subject to audit for compliance with a variety of Federal guidelines.

This chapter will briefly discuss auditing in general terms, specific audit requirements established by various grantors and the single audit concept as applied to grantees. A self-audit guide (Appendix F) for use by grantees will also be discussed in this chapter.

The Committee on Basic Auditing concepts established by the American Accounting Association has defined auditing as:

> a systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria and communicating the results to interested users. [28:2]

The committee noted that this definition was sufficiently broad "to encompass the many different purposes for which an audit might be conducted." [28:2]

Auditing is not a new concept. It dates from at least 3000 B.C. and the Mesopotamien civilization. The Egyptians required audits, and in the context of government grants, it is interesting to note that in 1492 Columbus "was accompanied to America by an auditor representing Queen Isabella." [29:24]

The Federal agencies are required to audit grant recipients by virtue of the Accounting and Auditing Act of 1950. [30:1] The absence of Federal grants would not necessarily eliminate the need for a city to have audits since approximately 40 states require cities to have an annual audit. [31:119]

The primary purpose of this chapter is to discuss the audit requirements associated with Federal grants. The audit guide presented in Appendix F relates solely to grants. However, the authors' contend that a properly conducted audit that covers financial, compliance and operational areas is of benefit to a municipality whether they receive Federal grants or not. It has been noted that the "effects of [Proposition] 13 on California's many local governments have only begun to be felt." [32:80] As expenses continue to increase at a rate in excess of that for revenues "we must learn to do more with less resources." [33:17] Audits can help in this endeavor.

While the purpose of this chapter is primarily to discuss grant auditing, the functions of an internal auditor would be of benefit to grant programs. A functioning internal audit staff would help to ensure compliance with Federal grant requirements. [34:61] A major role of government is that of "stewardship," that is, "the protection and prudent use of citizens' resources." [31:240] "Administrators at all levels [of government] must be satisfied that the taxpayers' money has been spent legally and wisely." [31:240] Audits are needed to properly provide that "stewardship."

B. AUDITS FOR GRANTS

As noted in Chapter III grant recipients are accountable for Federal funds received. Grant funds are provided for a specific purpose and the grantee must be able to document that the funds were spent for the intended purpose and in compliance with applicable Federal laws and regulations.

The need for proper accounting of grant funds has never been greater, in light of the growth in Federal grant assistance to State and local government since 1976. In 1967 grant assistance amounted to about $15 billion and in 1980 it was about $88 billion. The Office of Management and Budget (OMB) has estimated that assistance in 1981 will be $96.3 billion. [35:18] The assistance is "provided to the governments of all 50 states, 3,000 counties, and nearly 90,000 local jurisdictions." [30:1] In 1970 there

were 868 federal assistant programs. By 1980 there were more than 1100 individual programs "administered by all Executive Departments and at least 44 other agencies." [35:18] Twenty-five of those programs account for 80 percent of all the assistance to State and local governments. [35:19]

The General Accounting Office (GAO) has stated that "audits are one of the principal bases the [Federal] agencies have to see that grantees have properly handled their Federal funds." [36] The OMB has issued various circulars that establish audit requirements for the Federal departments and agencies.

1. OMB Guidelines

Federal Management Circular 74-4, "Cost principles applicable to grants and contracts with State and local governments" (FMC 74-4) was issued in the mid 1960's, as OMB Circular A-87, to establish "principles and standards for determing costs applicable to grants and contracts with State and local governments." [11] FMC 74-4 has a rather narrow focus and therefore OMB issued Circular A-102, "Uniform Administrative Requirements for Grants-in-Aid to State and local Governments" (A-102) in 1971 to "replace the multitude of varying and often times conflicting requirements in the same subject matter which have been burdensome to the State and local governments." [37:45828] "The standards promulgated by [A-102] apply to all Federal agencies responsible for administering programs that involve

grants to State and local governments." [37:45828] A-102 did provide that the requirements of grant enabling legislation, if different from the standards of A-102, would apply. Issued orginally in 1965 OMB Circular A-73, "Audit of Federal Operations and Programs" (A-73) established audit standards "to be followed in the audit of Federal operations and programs." [38:1] A-73 defined audit to mean:

> a systematic review of appraisal to determine and report on whether:
>
> (1) Financial operations are properly conducted;
>
> (2) Financial reports are presented fairly;
>
> (3) Applicable laws and regulations have been complied with;
>
> (4) Resources are managed and used in an economical and efficient manner; and,
>
> (5) Desired results and objectives are being achieved in an effective manner. [38:1]

A-73 requires that audits be conducted in accordance with Standards for Audit of Governmental Organizations, Programs, Activities and Functions issued by the Comptroller General of the United States. A-73 also provides that:

> The scope of individual Federal audits will give full recognition to the non-Federal audit effort. Reports prepared by non-Federal auditors will be used in lieu of Federal audits, if the reports and supporting workpapers are available for review by the Federal agencies, if testing by Federal agencies indicates the audits are made in accordance with generally accepted auditing standards (including the audit standards issued by the Comptroller General), and if the audits otherwise meet the requirements of the Federal agencies. [38:4]

It would seem that A-73 and A-102 when combined with Federal Management Circular 74-4, "Cost principles applicable

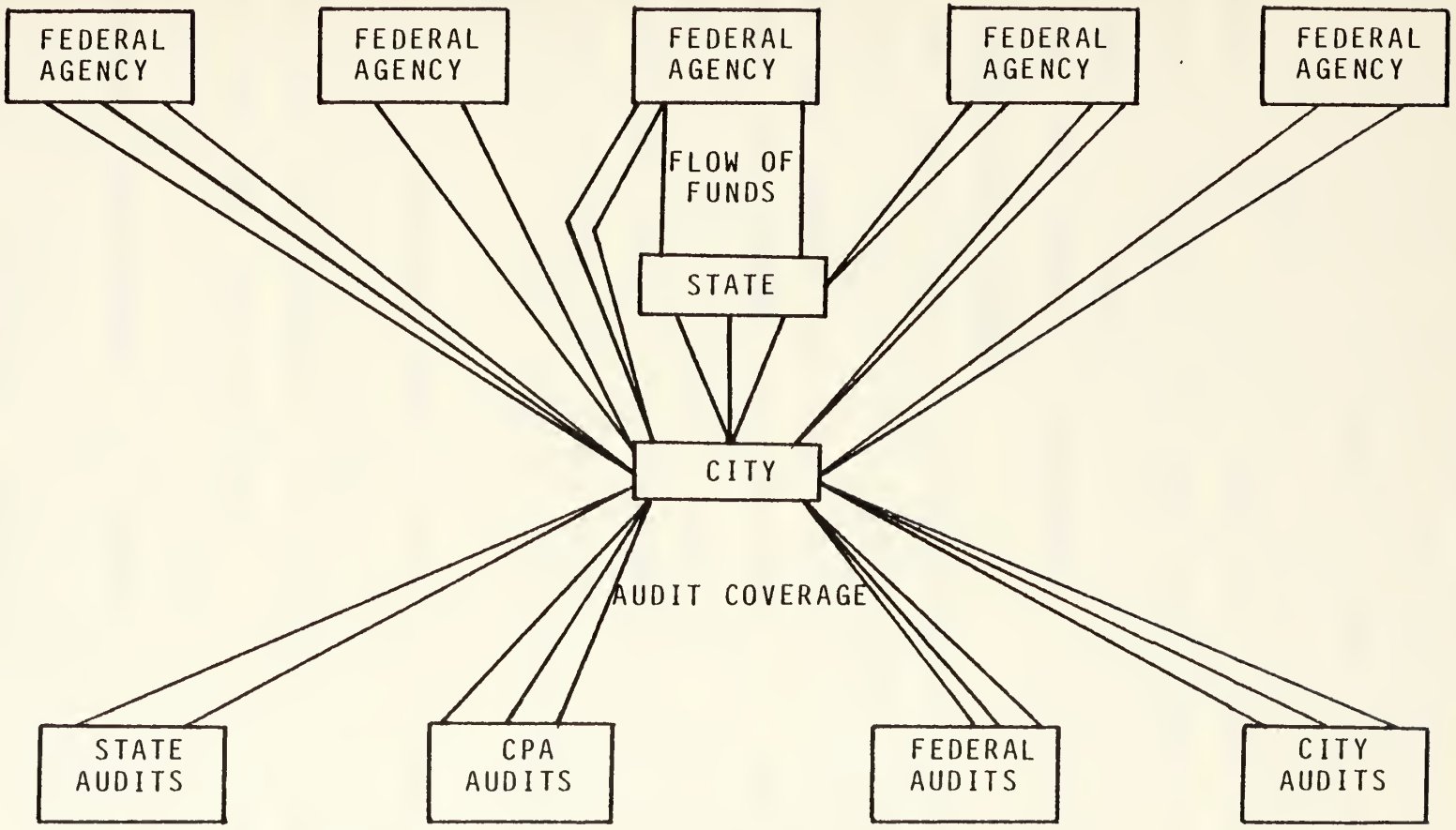
to grants and contracts with State and local governments" (FMC 74-4) would provide a measure of uniformity in the administration of grants by Federal departments and agencies. GAO and others have noted that there is a lack of uniformity in grant administration between departments and agencies and even within a single department. [39:10]

The lack of uniformity in the administration of grants is obvious in the area of auditing. GAO and others have noted that there is often a great deal of duplication of effort in the auditing of grants and at other times there are no audits at all. [30:7] [31:233] Exhibit V-1 depicts the current approach to the auditing of Federal grants for a city. Exhibit V-1 is not intended to be representative of all cities but rather to show the piecemeal approach to auditing by the funding organization at the local level. [40:58]

A major reason for the duplication of effort is that "Federal agencies usually audit their own grant programs without concern for grant programs of other agencies." [30:7] The grant audits usually focus on compliance without looking at the total organization's financial records and controls. Conversely non-Federal organizations audit financial records and controls without regard for compliance with Federal grant requirements. [30:7] The audits performed by different groups are seldom useful to others.

EXHIBIT V-1

CURRENT AUDIT APPROACH



SOURCE: JOINT FINANCIAL MANAGEMENT IMPROVEMENT PROGRAM,"REPORT ON AUDIT OF FEDERALLY ASSISTED PROGRAMS: A NEW EMPHASIS" FEBRUARY 1979

The lack of the full implementation of A-73, A-102 and FMC 74-4 is the primary reason for the duplication of audit efforts. [40:6] This duplication of effort not only is wasteful of the auditors time, it is likely to disrupt the grantee's staff. [30:9] The United States Senate Appropriations Committee noted that "this approach to auditing Federal assistance programs provides little assurance that Federal funds are properly safeguarded..." [41:16]

2. Single Audit Concept

The "ideal" audit of a grant recipient is one that is acceptable to all the funding organizations. [30:7] The audit would demonstrate "the recipient's financial records and controls are adequate and should check for compliance with important terms of the grant received. Such audits would be made when needed. Funding organizations would then be free to perform additional audits of economy and efficiency and of program results as deemed necessary." [30:8]

In 1977 President Carter noted his Administration's desire "to eliminate the duplication and wasteful effort that too often has accompanied the management of Federal grants to State and local governments." [42] President Carter noted that one area of improvement was in the coordinating of grant audits. He expected "Federal agencies to use their audit plans as a basis for making greater efforts to improve interagency cooperation on audits, to increase Federal coordination with State and local auditors, and to increase reliance on audits made by others." [42]

In response to President Carter's initiative OMB issued Attachment P-Audit Requirements to A-102. Attachment P "requirements are established to insure that audits are made on an organization - wide basis, rather than on a grant-by-grant basis." [43:609 59] The provisions of the Attachment also require the Federal agencies to rely on independent audits arranged by the grant recipients, provided the requirements of the Attachment have been met. The Attachment requires that audits "be made in accordance with the GAO Standards for Audit of Governmental Organizations, Programs, Activities and Functions, the Guidelines for Financial and Compliance Audits of Federally Assisted Programs. Any compliance supplements approved by OMB, and generally accepted auditing standards established by the American Institute of Certified Public Accountants." [43:60959]

At a minimum the audits will include: "an examination of the systems of internal control, systems established to ensure compliance with laws and regulations affecting the expenditures of Federal funds, financial transactions and accounts, and financial statements and reports of recipient organizations." [43:60959]

Attachment P also provides directions on the testing of charges to Federal awards, requirements of the audit report and retention of work papers. The Attachment also provided that a "cognizant [Federal] agency" would be assigned audit responsibility for grant recipients by OMB.

In October 1980 OMB published a list of cognizant agencies for State agencies but as of February 1981 cognizant agencies for local governments had not been established.

In concert with OMB and other Federal agencies the GAO issued Guidelines For Financial And Compliance Audits Of Federally Assisted Programs in February of 1980. The guide provides "a uniform documentation procedures for financial and compliance audits of organizations receiving funds from several Federal agencies or under several federally assisted programs so that the needs of each Federal, State, and local funding agency for audited financial information are satisfied." [44:2]

OMB issued a supplement to A-102 which summarized the major compliance features of Federal law and regulation of 60 programs. Those 60 programs account for 90 percent of the Federal aid to State and local governments. [45:55086] This supplement complements the GAO guidelines noted above and is intended to be used in conjunction with the guidelines. Attachment P to A-102, along with the GAO guidelines and the supplement to A-102 containing the compliance features of 60 major programs, appears to eliminate many of the causes of duplicate audits discussed previously in this chapter.

In the past, local governments have employed independent Certified Public Accountants (CPA) to audit grants on a grant-by-grant basis and have separately engaged CPA's

to audit the general fund accounts. With the additional guidance available to CPA's it is feasible to expect State or local government entity to engage a CPA to perform a single audit in compliance with Attachment P to A-102.

While the authors' research showed that the concept of the single audit was not new, the actual application of the single audit was very limited. The Office of Revenue Sharing (ORS) has applied the single audit concept on a large scale. Mr. T. Jack Gary, Manager of the Audit Division of the ORS noted that the ORS experience "shows that the single audit approach is possible, efficient, and effective. The overall result of the audit requirements has been a great improvement in the quality of the State and local government audits." [31:237]

Exhibit V-2 is a pictorial representation of the single audit concept. As one can readily see the single audit concept is distinctly different from the current audit approach shown in Exhibit V-1. The number of interactions for the grant recipient are minimized.

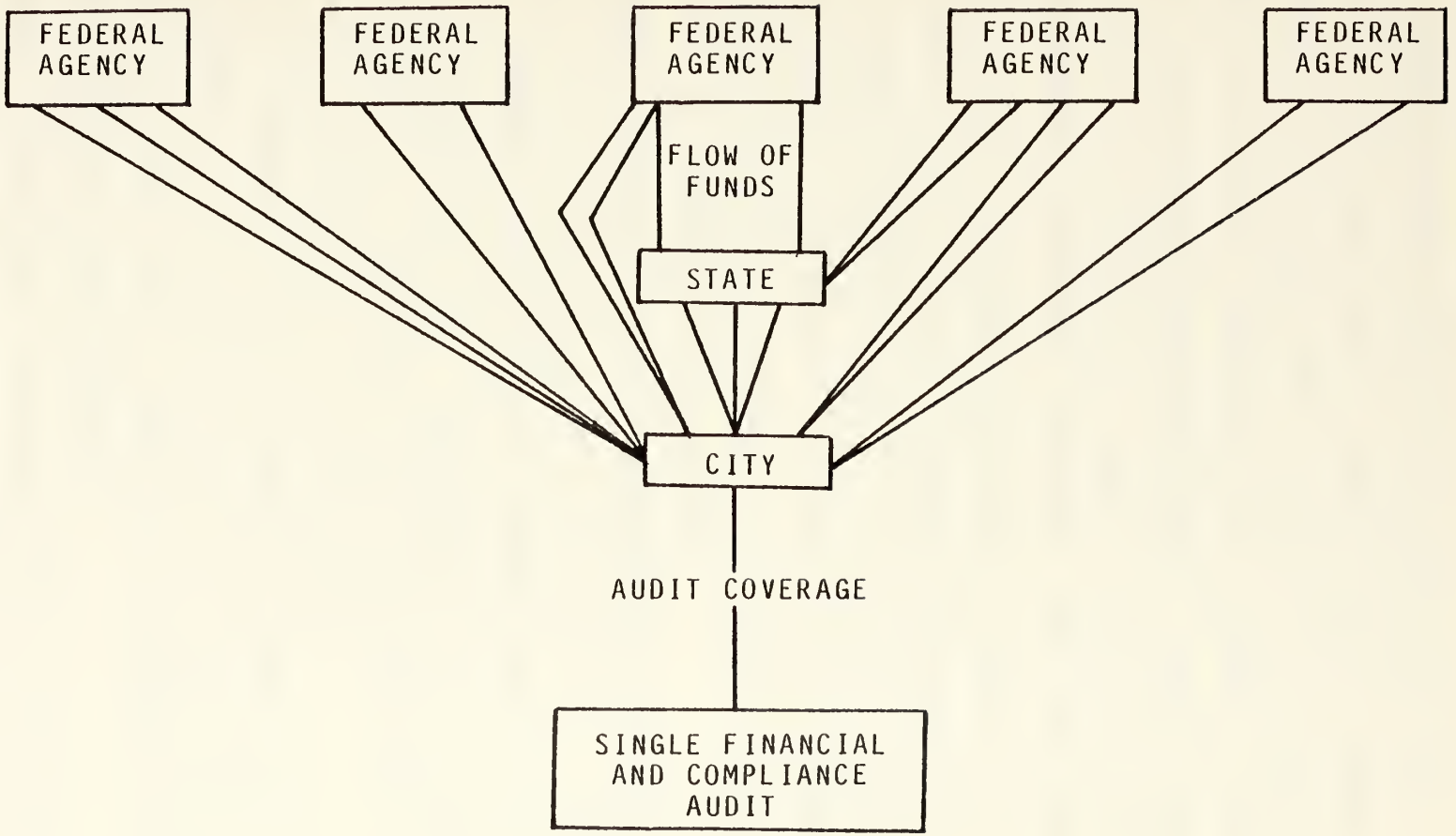
The Senate Appropriations Committee noted that OMB had issued Attachment P to A-102 and directed OMB to implement its provisions as "fully and expeditiously as possible." [41:17]

As noted by Mr. James T. McIntyre, Jr.:

> A major change in audit policy which affects the Government's of all 50 States, 3,000 counties and almost 90,000 local jurisdictions will undoubtedly take time to implement fully. However we [OMB] will vigorously pursue the full adoption of the single audit concept. [46]

EXHIBIT V-2

SINGLE AUDIT APPROACH



SOURCE: JOINT FINANCIAL MANAGEMENT IMPROVEMENT PROGRAM,"REPORT ON AUDIT OF FEDERALLY ASSISTED PROGRAMS: A NEW EMPHASIS" FEBRUARY 1979

C. GRANTEE REQUIREMENTS

The thrust of this section is on the action that can be taken by a local government, particularly a municipality to accommodate the single audit concept. Most municipal governments have been in existence for a number of years and have a functioning accounting system. A major question is, "Is the system adequate to support claims for reimbursement when Federal grants are involved"? The local government must be able to document the direct charges to a Federal grant as well as show a causal relationship for indirect charges that are part of the allowable indirect cost pool and the cost allocation plan. A good internal audit program can help to ensure an affirmative answer to the question of adequacy of the system.

Personnel charges are best supported by time cards that show the jobs actually worked on by the employee. Periodic surveys of employee activities are another means of determining how charges are made. Regardless of the method used an auditor must be in agreement with the method used or the charges may be determined to be unallowable.

The disallowances of costs already incurred and paid for from grant funds could be costly to a local government. In essence the funds must be repaid to the Federal government from the general fund accounts.

A strong financial and internal control system would minimize the amount of unallowable costs in the opinion of the authors. Part of the internal controls system is an internal audit staff.

Skilled internal auditors can help: 1. reduce costs, 2, improve efficiency, 3. eliminate unproductive activities, and, 4. aid in accountability. [34:61] The internal audit function of a local government should provide the following services:

- check application of administrative policies and directives
- evaluate the effectiveness of administrative control systems
- confirm the existence of assets with a view toward preventing or discovering fraud
- check the authenticity, completeness and fairness of accounting and financial data
- assess the effectivenss and efficiency of operations and activities
- check compliance with numerous federal and state grant programs
- provide a training ground for management-oriented personnel
- handle certain nonrecurring problems that require an investigative approach [34:64]

Appendix F of this thesis of a reproduction of Appendix I, "Internal control review questionnaire and documentation guide" from the 1980 GAO guidelines. This Appendix can be used by a municipal government as a self-check of the governments systems to identify areas of weakness or concern. Prior planning for an audit should minimize the trauma and help to minimize any surprises arising from the audit.

D. CHAPTER SUMMARY

The principal thrust of this chapter has been to discuss the audit requirements for grants and introduce the single

audit concept as it will relate to grant audits and allowable cost. The single audit should serve the needs of all the funding organization of a government entity, if carried out in accordance with A-102 and its recent amendments.

The use of an internal audit staff can ensure compliance with Federal grant requirements of a more local nature. The use of Appendix F as a self-check of items that will be or should be the subject of an audit that meets the requirements for a single audit. The minimization of costs determined to be unallowable as a result of audit is a worthwhile goal. Proper attention to the requirements of FMC 74-4 and A-102 should make this an attainable goal. Chapter VI will present the thesis contribution to the area of cost accounting for municipalities.

VI. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

A. INTRODUCTION

In this chapter the original objectives of the thesis and the accomplishments of the thesis will be summarized. Additionally, the authors will review the reasons for development of Cost Allocation Plans and indirect cost rates in a municipal government. Some new ideas to be considered by municipal managers in developing future cost allocation plans will be presented including depreciation, interest, statistical surveys and audit requirements. Finally, the key contributions this thesis makes to the field of cost allocation for municipal governments and recommendations for future study will be briefly discussed.

B. ACHIEVEMENT OF OBJECTIVES

The objectives as stated in Chapter I were: 1. assess the current state of the art in cost allocation methods for municipalities; 2. provide a theoretical and practical means for identifying indirect cost as distinguished from direct costs of operating municipal government departments and externally funded projects and programs; and, 3. develop a cost allocation model/plan that is based on the current state of the art, yet simple and useable by municipal governments. The authors believe that these objectives have been achieved. Extensive research through cost accounting

literature failed to reveal any substantive amount of articles regarding cost allocation applications for municipal governments. With that situation in mind the authors assessed the cost accounting literature as it applied to business and adopted the concept for use in a government setting. Chapter II reviewed the cost accounting concepts which provide the background and foundation for developing a cost allocation plan in general. Although the purposes for which cost allocation plans are developed may be different between a business and government entity the concepts and techniques of cost allocation are similar. In presenting the cost accounting material of Chapter II it was this similarity that was pursued in discussing the cost allocation methods for municipalities.

The discussion of direct cost and indirect cost as one means of classifying cost was also presented within the concepts of cost accounting in Chapter II. For the most part the thesis material represents theoretical ideas from authoritative texts. This discussion was supplemented by reinforcing the ideas of direct and indirect cost as applicable to grants and contracts. The practical application of the notion of traceability to a unit of product or organizational segment provides the key idea to the determination of direct and indirect cost. Once the object of cost, that is a service, program or department, is determined by the management of the organization the cost can be determined as direct or indirect. Direct meaning directly traceable to the object of cost or indirect meaning allocable to the object of cost.

The discussion of direct and indirect cost was pursued in order to achieve thesis objective number two. Finally, the background and foundation information discussed in Chapter II with some discussion of practical cost allocation methodologies in Chapter IV was utilized to prepare the Cost Allocation Plans for the City of Monterey, California. In Chapter IV two plans were developed, one for internal management purposes and one for use in recovery of indirect cost under grants and contracts with the Federal government. In the development of both plans the concerns of the authors were conservatism, simplicity and useability. Following those concerns the explanation of the methods employed to perform the allocation of cost and the computation of an indirect cost rate was supported by exhibits and appendices of detailed data to provide future users with the ability to trace a plan development.

C. COST ALLOCATION PLANS AND INDIRECT COST RATE DEVELOPMENT

A GAO report issued in March of 1979 regarding Federal Cost Principles as applied to grants and contracts with the Federal government indicated two interesting points. First, grant making officials of many Federal agencies actively discourage preparation of Cost Allocation Plans and indirect cost rates. Second, even when not actively discouraged by grant making officials many local governments felt that the cost of preparing plans and rates did not justify the benefits. Although these points are not startling they

represent a real dilemma for local government officials. The authors believe that some very real benefits derive from the activity of developing a cost allocation plan.

In developing the plan the local officials responsible are presented with a view of the organization heretofore buried within the highly structured accounting system. With an internal cost allocation plan local government officials are made aware of the Full/Total cost of providing a service. The Full cost being the sum of the Direct Cost, the internal mission department overhead and the allocated overhead from various support departments. Although control of these costs may be scattered throughout the organization they represent very real cost which must be explored in providing required or requested services or in decision making activities.

The development of departmental overhead/indirect cost rates based on the results of the overhead cost plan provide mission department managers with the information necessary to recommend and support service fees and user charges. Without this information, at worst mission departments recover only the direct cost of providing a service (labor hours and materials). At best, with an arbitrary surcharge the mission department may recover direct costs and some of the overhead.

With the development of a Cost Allocation Plan and indirect cost rate proposal for grants and contracts the local government derives the ability to recover the invisible but real cost of supporting the grant operation. The grant

or contract assumes a position within the local government organization similar to a division or segment of a mission department thereby sharing some of the overhead that the mission department and the grant/contract cause or benefit from. The development of a cost allocation plan and indirect cost rate proposal for either internal purpose or for recovery of overhead/indirect cost from grants and contracts requires time, effort and accurate accounting and statistical information. However, to be effective and informative it does not require mathematical complexity. This was demonstrated in Chapter IV by a non-complex direct allocation method.

Although local government may not be able to control or influence the actions of Federal grant makers as discussed in the GAO report. The local government should, through cautious selection of allocation methods and improved accounting/statistical information, be able to reduce preparation cost and realize benefits.

The benefits described consist of; 1. an understanding of the full cost of providing a particular service to the electorate by a mission department; 2. a determination of an overhead rate based on the predominant activity of a mission department so that services provided which are not required of a government can be accurately charged to a requestor; and, 3. a determination of an indirect cost rate based on allowable eligible costs to be assessed against grants or contracts so that the Federal government contributes its "fair share" toward the overhead of the local

government. The decision to prepare a cost allocation plan should take these benefits into consideration. In summary, the benefits of cost allocation plan preparation provide for the bearing of cost by that entity which causes the cost. Additionally, cost allocation plans provide added insight into the costs involved in operating the organization and an improved management tool for better financial decision making.

D. NEW IDEAS FOR THE MUNICIPAL FINANCIAL MANAGER

With the introduction of cost allocation plans and indirect cost rate proposals into the municipal government some new concepts and some old concepts renewed require discussion. The authors do not intend to reiterate at length ideas already presented in the text. However, the authors do introduce for consideration of the manager faced with cost allocation plan development some additional ideas which may or may not be required. These additional ideas are:

1. Depreciation
2. Interest Expense-Debt service
3. Allocation below Department level
4. Statistical Surveys
5. Accounting Changes
6. Allowable Cost
7. Audit

1. Depreciation

Depreciation is a non-cash expense which in its simplest interpretation represents a spreading of the cost of acquisition of a fixed asset over its estimated useful life. Its purpose in general is to allow an organization

to write off the cost of equipment, building, etc. over a certain period of time in order to recoup funds, funds to be available for future asset replacement. Buildings and equipment that are to be replaced utilizing operating revenues (taxes in the case of a city) should be depreciated. In non-profit organizations there are arguments for and against the use of depreciation, especially, if buildings and equipment are to be regularly replaced through fund raising and the issuance of debt securities (municipal bonds) vice operating revenues. The discussion of use or non-use of depreciation accounting is extensive and beyond the scope of this thesis. However, the authors feel that depreciation should be considered within the context of cost allocation plans. If utilized the annual depreciation expense should be added to a special fund as an actual cash outlay to support future equipment/building acquisition/replacement.

2. Interest Expense

Interest expense on General obligation bonds represents a real expense in operating the General Fund Departments. Although for the most part an unallowable cost under grants and contracts with Federal agencies, it should be considered as a general overhead expense to the operating departments and allocated over some reasonable base in the internal Cost Allocation Plan. Interest expense associated with specific purpose bonds should be directly allocated to the department or fund under whose auspices the bonds were

issued; e.g., bonds issued for the construction of a parking garage, interest expense pertaining thereto should be directly allocated to the Parking Department or Parking Fund.

3. Allocation Below Department Level

Allocation of cost below department levels is especially useful for more accurate costing of services and programs existing within a particular department. Certain questions can be raised here: "is it necessary"?; "is the organization program budget oriented"?; and, "will the accounting system support cost accounting and cost allocation to this level of the organization"? The answer to these questions lies wholly within the purview of the municipal management. The cost allocation plan developed in Chapter IV provides a satisfactory allocation of cost and overhead rate. The budget and accounting system currently in existence at the City of Monterey will not support cost allocation below the department level.

Research and discussion with state and local government associations indicated that cost accounting especially as it relates to cost allocation for product/service costing is a new and challenging field. Many municipalities are only now finding it necessary to perform cost accounting at a service or program level. As financial resources to support local government become more and more scarce accurate costing below organization department level will become necessary to protect viable and worthwhile services and

programs. Cost Allocation plans and indirect cost rates support this new level of accounting. One benefit of cost allocation to the program level has been previously discussed, this is the situation where two or more departments are involved in a program. Each department involved in a program can apply its overhead rate to its involvement in the program thereby achieving a more accurate distribution of its overhead and more accurate costing of the program to the public.

4. Statistical Surveys

Statistical surveys may be the newest and most difficult requirement introduced by the cost allocation plan. Record keeping of the services provided or services accepted is time consuming and tedious. In some instances record keeping may be as simple as purchase order transactions or data processing time and as difficult as management or staff policy guidance. In any event some methodology must be developed based on the service/support provided to ensure reasonable allocation of costs to those organization entities that cause or benefit from the cost. Subjective estimates and statistical surveys are only as good as the person providing the estimate, or as accurate as the data base and data measuring in the statistical survey. Utilizing the bases recommended in Chapter IV and the Appendices with some accounting department changes to be recommended, a substantially accurate allocation of costs to any level of the organization is possible.

5. Accounting Changes

The recommended accounting changes are made solely to facilitate the preparation of a cost allocation plan. Obviously, with conflicting requirements management must make the change based on their perception of the needs of the organization. There are three specific accounting changes recommended. First, increase the number of accounting centers within the current organization structure to capture cost more specifically by the service provided. For example, creating a purchasing accounting center and a data processing accounting center, these costs are currently buried within the Finance Admin and Finance Accounting Departments. Exhibit II-1 provides recommended/existing support centers. Essentially this recommendation means accounting separately for specific types of services provided and allocated.

Second, creating overhead accounts within the mission departments (service department costs are all overhead). For example, the labor cost associated with the planning director is indirect labor (an Overhead account), another example is overtime labor cost for a department. This action will require taking each account on a case by case basis and determining within the context of the plan and levels of allocation the accounts that are directly traceable or are allocable to the organizations defined cost objective. Appendix B indicates the accounts which were considered overhead for the Direct Allocation Cost Allocation Plan developed in Chapter IV.

Third, a separate accounting center should be established for any grant/contract in which the organization participates. Although within the organization structure of a city the grant assumes a position similar to a division of a department, separate accounting for grants will facilitate accounting for direct cost of grants and will allow for the allocation of indirect cost based on services provided to the grant. As was earlier pointed out, these changes will facilitate preparing the cost allocation plan. With the introduction of the city's new computer system the record keeping and accounting changes should be relatively simple to effect and will provide for swifter determination of overhead costs and indirect cost rates.

6. Allowable Cost

A municipal government with one or more Federal grants should be fully aware of allowable and unallowable costs as discussed in Chapter III. Failure to understand and properly account for these costs may result in the municipal government failing to claim and obtain reimbursement for allowable cost or having to make a refund for unallowable costs that were erroneously claimed. A full appreciation of allowable costs, direct and indirect, coupled with a properly prepared cost allocation plan will ensure that the local government has identified the maximum costs eligible for reimbursement. At the same time this minimizes the amount of general funds that must be appropriated to augment the Federal funds to carry out the grant program.

7. Audit

Audits of grant recipients in the past have been inconsistent. This has resulted in a great deal of duplicate effort. The single audit concept discussed in Chapter V should help to eliminate much of the duplicate effort. The grantee with a good financial and internal control system should be able to adequately support the cost claimed. A strong internal audit program can help to identify inefficiency and ineffective programs. The internal auditor can be used to review compliance with grant requirements as well as State and local requirements. The internal auditor can be a significant factor in assuring that public funds are properly spent and accounted for.

The audit guide presented in Appendix F is intended to help the local government ensure that its grant accountability is in accordance with A-102 and FMC 74-4. The Appendix can also be used to evaluate a local government's financial and internal controls system. While the guide represents preferred practices for grantees they are equally applicable for any level of government.

E. RECOMMENDATIONS FOR FUTURE STUDY

During the research and writing of this thesis the authors' encountered several areas of interest for future study. These areas are briefly discussed in the following paragraphs.

In section C of this chapter the authors discussed the benefits of developing cost allocation plans and indirect cost rates. An area of further study with regard to the benefits would be a cost-benefit analysis to determine in actual monetary terms the value to an organization of developing plans and indirect cost rates. The technique of Dollarization could be employed, that is, assessing in dollar terms the cost of not developing indirect cost rates.

As the thesis research progressed every attempt was made to understand the internal services in the city so that they could be integrated within the cost allocation plan. There were several services which were not specifically costed due to their incorporation within current city accounting departments, such as, internal auditing, budget preparation and maintenance and central stores. An area of further study would be an organization operations study to determine any additional services internal to the city, integrating those services by specific accounting for those services and then expanding the cost allocation plan to incorporate the use of those services by mission departments.

Although the simplest allocation method, direct allocation, was chosen to demonstrate the Cost Allocation plan in Chapter IV other methods exist. An area of further study would be the development of cost allocation plans using the other methodologies and at the same time developing computer programs involving the more sophisticated methodologies. These computer programs could be adapted to the

City of Montereys' new computer system. In developing the computer application of various allocation methodologies plan preparation speed could be increased and at the same time benefit or value of result comparisons could be made.

Finally, a broader study could be made of the rules and regulations and guidelines various Federal agencies employ in their grant making procedures. A key interest area in this study could be an understanding of the reasons some federal agencies allow recovery of indirect cost through indirect cost rates and others do not allow recovery. Another area of interest would be the implication such policies have toward the future use of grants fund and what capital and environmental improvement adjustments cities must make to adjust to changing grant policies.

Each major area discussed within this thesis can provide some stimulus for further study. However, the authors attempted within this section to point out only some areas of immediate importance with beneficial impact to the cost allocation plan development.

F. CONTRIBUTION TO THE FIELD

This thesis has presented a single source of information with regard to the theory of cost allocation applicable to municipalities. It has also described allocation methodology, that can be used by a municipal government to prepare a cost allocation plan to improve internal management, identify total cost of user services and serve as a basis for reimbursement for grant purposes.

The primary beneficiaries of the cost allocation models presented in this thesis are the smaller municipal governments who do not have a large staff nor a large number of grant programs. Small municipalities, as well as their larger counterparts, need to develop cost allocation plans to identify total program costs and recover, as fully as possible, direct and indirect costs associated with Federal grants. The lack of resources (money, personnel and time), in the opinion of the authors is the primary reason that smaller municipalities have not developed cost allocation plans. Voters' initiative, like California's Proposition 13, that limit a government's ability to obtain revenue through property taxes provide impetus for better management techniques and user fees. Cost allocation plans are useful for improving internal management and identifying the total cost of various services. It is hoped that this thesis may encourage smaller municipalities to develop a cost allocation plan, at least on an informal basis, in order to gain some insight into the total cost of operating services.

STANDARDS FOR SELECTED ITEMS OF COST

A. *Purpose and applicability*

1. *Objective*. This attachment provides standards for determining the allowability of selected items of cost.

2. *Application*. These standards will apply irrespective of whether a particular item of cost is treated as direct or indirect cost. Failure to mention a particular item of cost in the standards is not intended to imply that it is either allowable or unallowable, rather determination of allowability in each case should be based on the treatment of standards provided for similar or related items of cost. The allowability of the selected items of cost is subject to the general policies and principles stated in Attachment A of this circular.

B. *Allowable costs.*

1. *Accounting*. The cost of establishing and maintaining accounting and other information systems required for the management of grant programs is allowable. This includes cost incurred by central service agencies for these purposes. The cost of maintaining central accounting records required for overall State or local government purposes, such as appropriation and fund accounts by the Treasurer, Comptroller, or similar officials, is considered to be a general expense of government and is not allowable.

2. *Advertising*. Advertising media includes newspapers, magazines, radio and television programs, direct mail, trade papers, and the like. The advertising costs allowable are those which are solely for:

a. Recruitment of personnel required for the grant program.

b. Solicitation of bids for the procurement of goods and services required.

c. Disposal of scrap or surplus materials acquired in the performance of the grant agreement.

d. Other purposes specifically provided for in the grant agreement.

3. *Advisory councils*. Costs incurred by State advisory councils or committees established pursuant to Federal requirements to carry out grant programs are allowable. The cost of like organizations is allowable when provided for in the grant agreement.

4. *Audit service*. The cost of audits necessary for the administration and management of functions related to grant programs is allowable.

5. *Bonding*. Costs of premiums on bonds covering employees who handle grantee agency funds are allowable.

6. *Budgeting*. Costs incurred for the development, preparation, presentation, and execution of budgets are allowable. Costs for services of a central budget office are generally not allowable since these are costs of general government. However, where employees of the central budget office actively participate in the grantee agency's budget process, the cost of identifiable services is allowable.

7. *Building lease management*. The administrative cost for lease management which includes review of lease proposals, maintenance of a list of available property for lease, and related activities is allowable.

8. *Central stores*. The cost of maintaining and operating a central stores organization for supplies, equipment, and materials used either directly or indirectly for grant programs is allowable.

9. *Communications.* Communication costs incurred for telephone calls or service, telegraph, teletype service, wide area telephone service (WATS), centrex, telpak (tie lines), postage, messenger service and similar expenses are allowable.

10. *Compensation for personal services.*

a. *General.* Compensation for personal services includes all remuneration, paid currently or accrued, for services rendered during the period of performance under the grant agreement, including but not necessarily limited to wages, salaries, and supplementary compensation and benefits (section B.13.). The costs of such compensation are allowable to the extent that total compensation for individual employees: (1) is reasonable for the services rendered, (2) follows an appointment made in accordance with State or local government laws and rules and which meets Federal merit system or other requirements, where applicable; and (3) is determined and supported as provided in b. below. Compensation for employees engaged in federally assisted activities will be considered reasonable to the extent that it is consistent with that paid for similar work in other activities of the State or local government. In cases where the kinds of employees required for the federally assisted activities are not found in the other activities of the State or local government, compensation will be considered reasonable to the extent that it is comparable to that paid for similar work in the labor market in which the employing government competes for the kind of employees involved. Compensation surveys providing data representative of the labor market involved will be an acceptable basis for evaluating reasonableness.

b. *Payroll and distribution of time.* Amounts charged to grant programs for personal services, regardless of whether treated as direct or indirect costs, will be based on payrolls documented and approved in accordance with generally accepted practice of the State or local agency. Payrolls must be supported by time and attendance or equivalant records for individual employees. Salaries and wages of employees chargeable to more than one grant program or other cost objective will be supported by appropriate time distribution records. The method used should produce an equitable distribution of time and effort.

11. *Depreciation and use allowances.*

a. Grantees may be compensated for the use of buildings, capital improvements, and equipment through use allowances or depreciation. Use allowances are the means of providing compensation in lieu of depreciation or other equivalent costs. However, a combination of the two methods may not be used in connection with a single class of fixed assets.

b. The computation of depreciation or use allowance will be based on acquisition cost. Where actual cost records have not been maintained, a reasonable estimate of the original acquisition cost may be used in the computation. The computation will exclude the cost or any portion of the cost of buildings and equipment donated or borne directly or indirectly by the Federal Government through charges to Federal grant programs or otherwise, irrespective of where title was originally vested or where it presently resides. In addition, the computation will also exclude the cost of land. Depreciation or a use allowance on idle or excess facilities is not allowable, except when specifically authorized by the grantor Federal agency.

c. Where the depreciation method is followed, adequate property records must be maintained, and any generally accepted method of computing depreciation may be used. However, the method of computing depreciation must be consistently applied for any specific asset or class of assets for all affected federally sponsored programs and must result in equitable charges considering the extent of the use of the assets for the benefit of such programs.

d. In lieu of depreciation, a use allowance for buildings and improvements may be computed at an annual rate not exceeding two percent of acquisition cost. The use

allowance for equipment (excluding items properly capitalized as building cost) will be computed at an annual rate not exceeding six and two-thirds percent of acquisition cost of usable equipment.

e. No depreciation or use charge may be allowed on any assets that would be considered as fully depreciated, provided, however, that reasonable use charges may be negotiated for any such assets if warranted after taking into consideration the cost of the facility or item involved, the estimated useful life remaining at time of negotiation, the effect of any increased maintenance charges or decreased efficiency due to age, and any other factors pertinent to the utilization of the facility or item for the purpose contemplated.

12. *Disbursing service*. The cost of disbursing grant program funds by the Treasurer or other designated officer is allowable. Disbursing services cover the processing of checks or warrants, from preparation to redemption, including the necessary records of accountability and reconciliation of such records with related cash accounts.

13. *Employee fringe benefits*. Costs identified under a. and b. below are allowable to the extent that total compensation for employees is reasonable as defined in section B.10.

a. Employee benefits in the form of regular compensation paid to employees during periods of authorized absences from the job, such as for annual leave, sick leave, court leave, military leave, and the like, if they are: (1) provided pursuant to an approved leave system, and (2) the cost thereof is equitably allocated to all related activities, including grant programs.

b. Employee benefits in the form of employers' contribution or expenses for social security, employees' life and health insurance plans, unemployment insurance coverage, workmen's compensation insurance, pension plans, severance pay, and the like, provided such benefits are granted under approved plans and are distributed equitably to grant programs and to other activities.

14. *Employee morale, health and welfare costs*. The costs of health or first-aid clinics and/or infirmaries, recreational facilities, employees' counseling services, employee information publications, and any related expenses incurred in accordance with general State or local policy, are allowable. Income generated from any of these activities will be offset against expenses.

15. *Exhibits*. Costs of exhibits relating specifically to the grant programs are allowable.

16. *Legal expenses*. The cost of legal expenses required in the administration of grant programs is allowable. Legal services furnished by the chief legal officer of a State or local government or his staff solely for the purpose of discharging his general responsibilities as legal officer are unallowable. Legal expenses for the prosecution of claims against the Federal Government are unallowable.

17. *Maintenance and repair*. Costs incurred for necessary maintenance, repair, or upkeep of property which neither add to the permanent value of the property nor appreciably prolong its intended life, but keep it in an efficient operating condition, are allowable.

18. *Materials and supplies*. The cost of materials and supplies necessary to carry out the grant programs is allowable. Purchases made specifically for the grant program should be charged thereto at their actual prices after deducting all cash discounts, trade discounts, rebates, and allowances received by the grantee. Withdrawals from general stores or stockrooms should be charged at cost under any recognized method of pricing consistently applied. Incoming transportation charges are a proper part of material cost.

19. *Memberships, subscriptions and professional activities*.

a. *Memberships*. The cost of membership in civic, business, technical and professional organizations is allowable provided: (1) the benefit from the membership is related to the grant program. (2) the expenditure is for agency membership. (3) the cost of the membership is reasonably related to the value of the services or benefits received, and (4) the expenditure is not for membership in an organization which devotes a substantial part of its activities to influencing legislation.

b. *Reference material*. The cost of books, and subscriptions to civic, business, professional, and technical periodicals is allowable when related to the grant program.

c. *Meetings and conferences*. Costs are allowable when the primary purpose of the meeting is the dissemination of technical information relating to the grant program and they are consistent with regular practices followed for other activities of the grantee.

20. *Motor pools*. The costs of a service organization which provides automobiles to user grantee agencies at a mileage or fixed rate and/or provides vehicle maintenance, inspection and repair services are allowable.

21. *Payroll preparation*. The cost of preparing payrolls and maintaining necessary related wage records is allowable.

22. *Personnel administration*. Costs for the recruitment, examination, certification, classification, training, establishment of pay standards, and related activities for grant programs, are allowable.

23. *Printing and reproduction*. Cost for printing and reproduction services necessary for grant administration, including but not limited to forms, reports, manuals, and informational literature, are allowable. Publication costs of reports or other media relating to grant program accomplishments or results are allowable when provided for in the grant agreement.

24. *Procurement service*. The cost of procurement service, including solicitation of bids, preparation and award of contracts, and all phases of contract administration in providing goods, facilities and services for grant programs, is allowable.

25. *Taxes*. In general, taxes or payments in lieu of taxes which the grantee agency is legally required to pay are allowable.

26. *Training and education*. The cost of in-service training, customarily provided for employee development which directly or indirectly benefits grant programs is allowable. Out-of-service training involving extended periods of time is allowable only when specifically authorized by the grantor agency.

27. *Transportation*. Costs incurred for freight, cartage, express, postage and other transportation costs relating either to goods purchased, delivered, or moved from one location to another are allowable.

28. *Travel*. Travel costs are allowable for expenses for transportation, lodging, subsistence, and related items incurred by employees who are in travel status on official business incident to a grant program. Such costs may be charged on an actual basis, on a per diem or mileage basis in lieu of actual costs incurred, or on a combination of the two, provided the method used is applied to an entire trip, and results in charges consistent with those normally allowed in like circumstances in nonfederally sponsored activities. The difference in cost between first-class air accommodations and less-than-first-class air accommodations is unallowable except when less-than-first-class air accommodations are not reasonably available.

C. *Costs allowable with approval of grantor agency.*

1. *Automatic data processing*. The cost of data processing services to grant programs is allowable. This cost may include rental of

equipment or depreciation on grantee-owned equipment. The acquisition of equipment, whether by outright purchase, rental-purchase agreement or other method of purchase, is allowable only upon specific prior approval of the grantor Federal agency as provided under the selected item for capital expenditures.

2. *Building space and related facilities.* The cost of space in privately or publicly owned buildings used for the benefit of the grant program is allowable subject to the conditions stated below. The total cost of space, whether in a privately or publicly owned building, may not exceed the rental cost of comparable space and facilities in a privately owned building in the same locality. The cost of space procured for grant program usage may not be charged to the program for periods of nonoccupancy, without authorization of the grantor Federal agency.

a. *Rental cost.* The rental cost of space in a privately-owned building is allowable.

b. *Maintenance and operation.* The cost of utilities, insurance, security, janitorial services, elevator service, upkeep of grounds, normal repairs and alterations and the like, are allowable to the extent they are not otherwise included in rental or other charges for space.

c. *Rearrangements and alterations.* Cost incurred for rearrangement and alteration of facilities required specifically for the grant program or those that materially increase the value or useful life of the facilities (section C.3.) are allowable when specifically approved by the grantor agency.

d. *Depreciation and use allowances on publicly owned buildings.* These costs are allowable as provided in section B.11.

e. *Occupancy of space under rental-purchase or lease with option-to-purchase agreement.* The cost of space procured under such arrangements is allowable when specifically approved by the Federal grantor agency.

3. *Capital expenditures.* The cost of facilities, equipment, other capital assets, and repairs which materially increase the value or useful life of capital assets is allowable when such procurement is specifically approved by the Federal grantor agency. When assets acquired with Federal grant funds are (a) sold, (b) no longer available for use in a federally sponsored program, or (c) used for purposes not authorized by the grantor agency, the Federal grantor agency's equity in the asset will be refunded in the same proportion as Federal participation in its cost. In case any assets are traded on new items, only the net cost of the newly acquired assets is allowable.

4. *Insurance and indemnification.*

a. Costs of insurance required, or approved and maintained pursuant to the grant agreement, is allowable.

b. Costs of other insurance in connection with the general conduct of activities is allowable subject to the following limitations:

(1) Types and extent and cost of coverage will be in accordance with general State or local government policy and sound business practice.

(2) Costs of insurance or of contributions to any reserve covering the risk of loss of, or damage to, Federal Government property is unallowable except to the extent that the grantor agency has specifically required or approved such costs.

c. Contributions to a reserve for a self-insurance program approved by the Federal grantor agency are allowable to the extent that the type of coverage, extent of coverage, and the rates and premiums would have been allowed had insurance been purchased to cover the risks.

d. Actual losses which could have been covered by permissible insurance (through an approved self-insurance program or otherwise) are unallowable unless expressly provided for in the grant agreement. However, costs incurred because of losses not covered under nominal deductible insurance coverage provided in keeping with sound management practice, and minor losses not covered by insurance, such as spoilage, breakage and disappearance of small hand tools which occur in the ordinary course of operations, are allowable.

e. *Indemnification* includes securing the grantee against liabilities to third persons and other losses not compensated by insurance or otherwise. The Government is obligated to indemnify the grantee only to the extent expressly provided for in the grant agreement, except as provided in d. above.

5. *Management studies.* The cost of management studies to improve the effectiveness and efficiency of grant management for ongoing programs is allowable except that the cost of studies performed by agencies other than the grantee department or outside consultants is allowable only when authorized by the Federal grantor agency.

6. *Preagreement costs.* Costs incurred prior to the effective date of the grant or contract, whether or not they would have been allowable thereunder if incurred after such date, are allowable when specifically provided for in the grant agreement.

7. *Professional services.* Cost of professional services rendered by individuals or organizations not a part of the grantee department is allowable subject to such prior authorization as may be required by the Federal grantor agency.

8. *Proposal costs.* Costs of preparing proposals on potential Federal Government grant agreements are allowable when specifically provided for in the grant agreement.

D. *Unallowable costs.*

1. *Bad debts.* Any losses arising from uncollectible accounts and other claims, and related costs, are unallowable.

2. *Contingencies.* Contributions to a contingency reserve or any similar provision for unforeseen events are unallowable.

3. *Contributions and donations.* Unallowable.

4. *Entertainment.* Costs of amusements, social activities, and incidental costs relating thereto, such as meals, beverages, lodgings, rentals, transportation, and gratuities, are unallowable.

5. *Fines and penalties.* Costs resulting from violations of, or failure to comply with Federal, State and local laws and regulations are unallowable.

6. *Governor's expenses.* The salaries and expenses of the Office of the Governor of a State or the chief executive of a political subdivision are considered a cost of general State or local government and are unallowable.

7. *Interest and other financial costs.* Interest on borrowings (however represented), bond discounts, cost of financing and refinancing operations, and legal and professional fees paid in connection therewith, are unallowable except when authorized by Federal legislation.

8. *Legislative expenses.* Salaries and other expenses of the State legislature or similar local governmental bodies such as county supervisors, city councils, school boards, etc., whether incurred for purposes of legislation or executive direction, are unallowable.

9. *Underrecovery of costs under grant agreements.* Any excess of cost over the Federal contribution under one grant agreement is unallowable under other grant agreements.

APPENDIX B

EXTRACT OF GENERAL FUND EXPENSES
Report of Expenditures -- Departmental and Program Accounts --
City of Monterey (7/1/79-6/30/80)

		INDIRECT	DIRECT
1	MAYOR-COUNCIL		
215	Mayor-Council	5,498	
	TOTAL	5,498	
2	CITY MANAGER		
101	Salaries - Full Time	144,221	
102	Salaries - Overtime	182	
103	Salaries - Part Time	2,021	
106	Cash In Lieu of Benefits	1,782	
107	Holiday Pay	58	
201	Office Supplies	888	
202	Office Equip Maintenance	316	
203	Printing & Postage	2,811	
208	Dues & Publications	1,815	
209	Conference & Meetings	5,909	
216	Personnel Recruitment	17,121	
220	Contractual Services	26,606	
222	Training Services	4,840	
248	Vehicle Rental	3,000	
	TOTAL	211,570	
3	FINANCE/ADMINISTRATION		
101	Salaries - Full Time	35,540	
102	Salaries - Overtime	30	
103	Salaries - Part Time		
106	Cash In Lieu of Benefits	608	
107	Holiday Pay	343	
201	Office Supplies	364	
202	Office Equip Maintenance	153	
203	Printing & Postage	1,895	
208	Dues & Publications	303	
209	Conferences & Meetings	1,122	
220	Contractual Services	1,809	
222	Training Services		
248	Vehicle Rental	1,800	
	TOTAL	43,967	

		INDIRECT	DIRECT
4	FINANCE/REVENUE		
101	Salaries - Full Time	63,335	
102	Salaries - Overtime		
103	Salaries - Part Time	607	
106	Cash In Lieu of Benefits	1,290	
107	Holiday Pay		
201	Office Supplies	292	
202	Office Equip Maintenance	651	
203	Printing & Postage	2,038	
208	Dues & Publications	312	
209	Conferences & Meetings	460	
220	Contractual Services	4,550	
222	Training Services	168	
248	Vehicle Rental	3,500	
418	Collection Costs	130	
	TOTAL	77,333	
5	FINANCE/ACCOUNTING		
101	Salaries - Full Time	60,594	
102	Salaries - Overtime	636	
103	Salaries - Part Time	142	
106	Cash In Lieu of Benefits	1,041	
107	Holiday Pay	65	
201	Office Supplies	2,332	
202	Office Equip Maintenance	7,759	
203	Printing & Postage	2,737	
208	Dues & Publications	419	
209	Conferences & Meetings	210	
220	Contractual Services	11,805	
222	Training Services	273	
248	Vehicle Rental	500	
	TOTAL	88,513	
6	CITY CLERK		
101	Salaries - Full Time	30,681	
102	Salaries - Overtime		
103	Salaries - Part Time	672	
106	Cash In Lieu of Benefits	1,142	
201	Office Supplies	928	
202	Office Equip Maintenance	1,270	
203	Printing & Postage	26,667	

		INDIRECT	DIRECT
208	Dues & Publications	106	
209	Conferences & Meetings	65	
213	Advertising Services	9,233	
218	Municipal Code	375	
220	Contractual Services		
222	Training Services		
248	Vehicle Rental	500	
	TOTAL	71,639	

19 PRINTING

101	Salaries - Full Time		8,413
102	Salaries - Overtime		
103	Salaries - Part Time	3,414	
106	Cash In Lieu of Benefits	122	
202	Equipment Maintenance	4,345	
203	Printing & Postage	7,301	
205	Operating Supplies		13,846
499	Credits $34,054		
	Fringe Benefit		3,635
	TOTAL	15,182	25,894

7 CITY ATTORNEY

101	Salaries - Full Time	69,146	
102	Salaries - Overtime		
103	Salaries - Part Time	1,002	
106	Cash In Lieu of Benefits	300	
201	Office Supplies	729	
202	Office Equip Maintenance	829	
203	Printing & Postage	282	
208	Dues & Publications	3,414	
209	Conferences & Meetings	1,475	
219	Court Costs & Litigation	767	
220	Contractual Services		
222	Training Services		
248	Vehicle Rental	2,500	
	TOTAL	80,444	

		INDIRECT	DIRECT
8	MECHANICAL		
101	Salaries - Full Time		96,452
102	Salaries - Overtime		
103	Salaries - Part Time	3,938	
105	Tool Allowance	713	
106	Cash In Lieu of Benefits	1,461	
107	Holiday Pay		
201	Office Supplies	129	
202	Office Equip Maintenance	63	
203	Printing & Postage	148	
204	Safety Equipment	338	
205	Operating Supplies		2,911
206	Gas & Oil		105,158
207	Vehicle Paint & Material		591
208	Dues & Publications	94	
209	Conferences & Meetings	69	
220	Contractual Services		4,165
222	Training Services	200	
230	Uniform Clothing	693	
247	Automotive Supplies		42,803
248	Vehicle Rental	500	
249	Damage To City Property	3,811	
499	Credits $381,600		
	Fringe Benefits		31,868
	TOTAL	12,157	283,948
32	PWA/BUILDING MAINTENANCE		
101	Salaries - Full Time	110,382	
102	Salaries - Overtime	3,924	
103	Salries - Part Time	6,284	
106	Cash In Lieu of Benefits	765	
107	Holiday Pay	406	
201	Office Supplies	323	
202	Equip Maintenance	4,290	
204	Safety Equipment	442	
205	Operating Supplies	13,068	
208	Dues & Publications	25	
209	Conferences & Meetings	261	
211	Heat-Light-Power-Water		
214	Maintenance Buildings	8,637	
214.01	Rental Property Repairs	1,773	
220	Contractual Services	63,181	
222	Training Services	293	
230	Uniform Clothing	724	
246	Insect Control	1,400	
248	Vehicle Rental	8,000	
249	Damage To City Property	445	
	TOTAL	224,623	

		INDIRECT	DIRECT
9	PLANNING DEPARTMENT		
101	Salaries - Full Time	57,996	137,687
102	Salaries - Overtime	608	
103	Salaries - Part Time	3,033	
106	Cash In Lieu of Benefits	1,750	
201	Office Supplies	1,874	
202	Office Equip Maintenance	647	
203	Printing & Postage	9,378	
205	Operating Supplies		5,308
208	Dues & Publications	1,460	
209	Conferences & Meetings	3,985	
213	Advertising Services		96
220	Contractual Services		11,315
222	Training Services		
248	Vehicle Rental	8,500	
260.01	Plans & Surveys		23,479
260.02	Plans & Surveys - EIR		118,328
260.03	Condoversions		1,200
	Fringe Benefits		57,623
	TOTAL	89,231	353,036

INDIRECT LABOR - 3

1 Director
2 Secretaries

24	PLANNING/BLDG INSPECTION	
101	Salaries - Full Time	76,491
103	Salaries - Part Time	1,672
106	Cash In Lieu of Benefits	305
201	Office Supplies	569
202	Office Equip Maintenance	58
203	Printing & Postage	654
208	Dues & Publications	772
209	Conferences & Meetings	418
220	Contractual Services	910
222	Training Services	48
245	Plans Checking	17,723
248	Vehicle Rental	7,300
270	Substandard Bldg Abatemt	
	TOTAL	106,920

		INDIRECT	DIRECT
22	POLICE DEPARTMENT		
101	Salaries - Full Time	135,288	984,504
102	Salaries - Overtime	114,607	
103	Salaries - Part Time	9,021	
104	Reimbursable Extra Duty		14,448
105	Uniform Allowance		16,040
106	Cash In Lieu of Benefits	17,658	
107	Holiday Pay	19,819	
201	Office Supplies	4,367	
202	Office Equip Maintenance	2,789	
203	Printing & Postage	6,394	
204	Safety Equipment	7,813	
205	Operating Supplies		17,613
208	Dues & Publications	496	
209	Conferences & Meetings	2,743	
220	Contractual Services		5,673
222	Training Services	15,837	
225	Public Safety Services	17,143	
230	Uniform Clothing	89	
248	Vehicle Rental		
	Fringe Benefits		292,079
	TOTAL	476,062	1,330,357

INDIRECT LABOR - 6

Police Chief, Assist. Chief, Police Capt., Records Supervisor, Sec., Clerk Typist.

23	FIRE DEPARTMENT		
101	Salaries - Full Time	103,704	857,629
102	Salaries - Overtime	25,465	
103	Salaries - Part Time	4,207	
104	Reimbursable Extra Duty		312
105	Uniform Allowance		8,220
106	Cash In Lieu of Benefits	11,426	
107	Holidary Pay	38,315	
201	Office Supplies	734	
202	Office Equip Maintenance	574	
203	Printing & Postage		
205	Operating Supplies		2,089
207	Vehicle Paint & Material		4,233
208	Dues & Publications	751	
209	Conferences & Meetings	937	
211	Heat-Light-Power-Water		

		INDIRECT	DIRECT
214	Maint Bldgs & Grounds	7,825	
220	Contractual Services		2,108
222	Training Services	1,593	
226	Hydrant Rental		13,038
227	Fire Prevention	366	
228	Alarm Maintenance		(631)
229	Minor Fire Fighting Equip	6,251	
231	Linen Supplies	1,049	
247	Automotive Supplies		1,774
248	Vehicle Rental	62,000	
426	Physical Exam Program		9,065
	Fringe Benefits		247,860
	TOTAL	267,134	1,145,697

INDIRECT LABOR - 4

Fire Chief, 2 Asst. Chiefs, Sec.

38 CONFERENCE CENTER

101	Salaries - Full Time	45,929	115,440
102	Salaries - Overtime		464
103	Salaries - Part Time		8,560
105	Uniform Allowance		160
106	Cash In Lieu of Benefits		3,209
107	Holiday Pay		
201	Office Supplies		2,232
202	Office Equip Maintenance		1,862
202.10	Facility Equipment Maint		8,872
203	Printing & Postage		8,103
203.02	Printing & PTG-Art Comm		1,647
204	Safety Equipment		46
205	Operating Supplies		12,070
205.01	Facility Maint Supplies		6,053
205.02	Operating Supp-Art Comm		831
208	Dues & Publications		18,433
209	Conferences & Meetings		2,187
209.01	Promotional Travel		14,451
209.02	Conf & Meetings-Art Comm		1,919
211	Heat-Light-Power-Water		
220	Contractual Services		15,345
220.01	Rental Equipment		6,493
220.02	Contractual SVC-Art Comm		91
222	Training Services		573

		INDIRECT	DIRECT
230	Uniform Clothing		1,456
248	Vehicle Rental		6,200
401	Promotion & Advertising		113,386
401.01	Promotion		13,919
	Fringe Benefits		37,711
	TOTAL	45,929	401,713

INDIRECT LABOR -2

Director/Secretary

25 PUBLIC WORKS ADMIN

101	Salaries - Full Time	70,107
102	Salaries - Overtime	
103	Salaries - Part Time	91
106	Cash In Lieu of Benefits	1,699
201	Office Supplies	253
202	Office Equip Maintenance	179
203	Printing & Postage	1,060
208	Dues & Publications	412
209	Conferences & Meetings	1,405
220	Contractual Services	795
222	Training Services	11
248	Vehicle Rental	1,800
269	Weed Abatement	186
	TOTAL	77,998

INDIRECT LABOR - 3

Director, Admin Asst, Sec.

26 PWA/ENGINEERING

101	Salaries - Full Time	137,650
102	Salaries - Overtime	370
103	Salaries - Part Time	8,236
106	Cash In Lieu of Benefits	1,567
201	Office Supplies	332
202	Office Equip Maintenance	1,094
203	Printing & Postage	788

		INDIRECT	DIRECT
204	Safety Equipment		37
205	Operating Supplies		2,324
208	Dues & Publications		391
209	Conferences & Meetings		310
220	Contractual Services		10,251
222	Training Services		90
248	Vehicle Rental		5,800
	TOTAL		169,240

27 PWA/STREET MAINTENANCE

101	Salaries - Full Time		185,189
102	Salaries - Overtime		3,460
103	Salaries - Part Time		719
106	Cash In Lieu of Benefits		1,694
107	Holiday Pay		
201	Office Supplies		160
202	Office Equip Maintenance		
203	Printing & Postage		74
204	Safety Equipment		867
205	Operating Supplies		41,461
208	Dues & Publications		25
209	Conferences & Meetings		51
211	Heat-Light-Power-Water		
220	Contractual Services		618
222	Training Services		
230	Uniform Clothing		1,662
235	Traffic Safety Striping		26,200
236	Street Lighting		116,234
237	Traffic Signal		66,604
239	Traffic Safety Signs		9,426
248	Vehicle Rental		62,500
249	Damage to City Property		732
265	Gen Street Impr Engineer		500
268	Street Name Signs		2,500
	TOTAL		520,676

28 PWA/TUNNEL MAINTENANCE

202	Equipment Maintenance		349
205	Operating Supplies		1,800
211	Heat-Light-Power-Water		
239	Traffic Safety Signs		200
	TOTAL		2,349

		INDIRECT	DIRECT
29	PWA/STORM DRAIN MAINT		
101	Salaries - Full Time		54,775
102	Salaries - Overtime		2,667
103	Salaries - Part Time		
106	Cash In Lieu of Benefits		271
107	Holiday Pay		
201	Office Supplies		18
202	Equipment Maintenance		
203	Printing & Postage		8
204	Safety Equipment		294
211	Heat-Light-Power-Water		
220	Contractual Services		192
222	Training Services		
230	Uniform Clothing		333
240	Miscellaneous Drainage		9,331
265	Gen Street Impr Engineer		565
	TOTAL		68,454
30	PWA/SANITARY SEWER MAINT		
101	Salaries - Full Time		69,720
102	Salaries - Overtime		4,007
103	Salaries - Part Time		640
106	Cash In Lieu of Benefits		419
107	Holiday Pay		
201	Office Supplies		30
202	Equipment Maintenance		2,784
203	Printing & Postage		
204	Safety Equipment		194
205	Operating Supplies		19,049
208	Dues & Publications		8
209	Conferences & Meetings		
211	Heat-Light-Power-Water		
220	Contractual Services		9,820
222	Training Services		
230	Uniform Clothing		384
233	Rodent Control		1,500
	TOTAL		108,555

		INDIRECT	DIRECT
31	PWA/HARBOR		
101	Salaries - Full Time		36,631
102	Salaries - Overtime		
103	Salaries - Part Time		6,688
106	Cash In Lieu of Benefits		549
107	Holiday Pay		
201	Office Supplies		63
202	Equipment Maintenance		25
203	Printing & Postage		16
204	Safety Equipment		309
205	Operating Supplies		2,834
211	Heat-Light-Power-Water		
220	Contractual Services		524
230	Uniform Clothing		447
233	Rodent Control		780
235	Traffic Safety Striping		
248	Vehicle Rental		7,500
250	Structural Rep Wharf #1		4,320
251	Structural Rep Wharf #2		21,361
262	Launching Ramp Maint		296
298	Rent Southern Pac Prop		327
299	Rent Storage Seascout BL		300
	TOTAL		83,020
	Fringe Benefits		154,458
	GRAND TOTAL		1,106,752
37	PARK & RECREATION ADMIN		
101	Salaries - Full Time	49,069	
102	Salaries - Overtime	6	
106	Cash In Lieu of Benefits	440	
201	Office Supplies	1,762	
202	Office Equip Maintenance	370	
203	Printing & Postage	1,773	
208	Dues & Publications	246	
209	Conferences & Meetings	1,396	
220	Contractual Services	5,091	
222	Training Services		
248	Vehicle Rental	2,000	
	TOTAL	62,123	

INDIRECT LABOR - 3
Director
Secretary
Clerk Typist

		INDIRECT	DIRECT
35	PARK & RECREATION/PARKS		
101	Salaries - Full Time		269,843
102	Salaries - Overtime		1,092
103	Salaries - Part Time		6,049
106	Cash In Lieu Of Benefits		2,686
107	Holiday Pay		21
203	Printing & Postage		1,303
204	Safety Equipment		1,532
205.01	Operating Suppl Hardware		953
205.02	Operating Sup Irrigation		1,407
205.03	OP Suppl Power Equipment		1,304
205.04	OP Suppl Simoneau Plaza		403
205.05	OP Suppl Construction		1,264
205.06	OP Suppl Welding Shop		323
205.07	OP Suppl Tree Crew		794
205.08	OP Suppl Vet's Park		2,400
205.09	OP Suppl Miscellaneous		5,582
208	Dues & Publications		140
209	Conferences & Meetings		190
211	Heat-Light-Power-Water		
220	Contractual Services		21,505
221	Street Tree Planting		1,003
222	Training Services		215
230	Uniform Clothing		1,872
233	Rodent Control		50
243	Spec SVC Costs, Skindivg		840
248	Vehicle Rental		48,000
249	Damage to City Property		324
261.01	Agric Supl Soil Amendmnt		697
261.02	Agric Supl Pesticides		2,099
261.03	Agric Supl Nursery		773
261.04	Agric Supl Top Soil		1,004
261.05	Agric Supl Ballfield MNT		1,140
261.06	Agric Supl Comm Lndscape		498
261.07	Agric Supl Miscellaneous		695
	TOTAL		378,001
36	P & R/RECREATION		
101	Salaries - Full Time		87,449
102	Salaries - Overtime		193
103	Salaries - Part Time		86,525
106	Cash In Lieu of Benefits		1,084
107	Holiday Pay		143
203	Printing & Postage		11,195
204	Safety Equipment		500

		INDIRECT	DIRECT
205.01	Operating Suppl Plygrnds		5,586
205.02	Operating Suppl Yth Cntr		2,467
205.03	Operating Suppl Sports		4,501
205.04	Operating Suppl Tawse Pl		1,308
205.05	Operating Suppl N M N C		906
205.07	Op Suppl/Mty Comm Ctr		1,803
205.08	Operating Sup/Choraleers		1,316
208	Dues & Publications		307
209	Conferences & Meetings		478
210	Car Expense		1,770
211	Heat-Light-Power-Water		
212.01	Summer Camp Supp Day Cmp		2,987
212.02	Summer Camp Supp C Q S		5,708
220	Contractual Services		39,058
222	Training Services		40
248	Vehicle Rental		2,000
	TOTAL		257,324
	Fringe Benefits		131,110
	GRAND TOTAL		766,435

34 LIBRARY

101	Salaries - Full Time	62,004	179,543
102	Salaries - Overtime		
103	Salaries - Part Time	57,846	
106	Cash In Lieu of Benefits	4,190	
107	Holiday Pay	75	
201	Office Supplies	7,196	
202	Office Equip Maintenance	10,867	
203	Printing & Postage	3,172	
208	Dues & Publications	270	
209	Conferences & Meetings	1,086	
211	Heat-Light-Power-Water		
216	Personnel Recruitment	384	
220	Contractual Services		6,190
222	Training Services	410	
248	Vehicle Rental	10,700	
254	Books & Printed Matter		65,989
255	Newspapers & Magazines		4,776
256	Binding & Rebinding		2,443
257	Films & Microfilm		7,185
258	Phonograph Records		1,991
	TOTAL	138,150	338,852

INDIRECT LABOR - 3
City Librarian
Asst. City Librarian
Sec.

		INDIRECT	DIRECT
39	MUSEUM		
101	Salaries - Full Time		15,456
103	Salaries - Part Time		5,394
106	Cash In Lieu of Benefits		244
202	Office Equip Maintenance		103
203	Printing & Postage		260
205	Operating Supplies		307
208	Dues & Publications		390
209	Conferences & Meetings		40
	Fringe Benefit		6,070
	Communications		611
	TOTAL		28,875

APPENDIX C

WORKSHEET FOR PRIMARY ALLOCATION

MISCELLANEOUS & FIXED EXPENSES	MAYOR COUNCIL	CITY MANAGER PERSONNEL	PRINTING	CITY CLERK	CITY ATTORNEY	FINANCE ADMIN	MECHANICAL
OVERHEAD BEFORE PRIMARY ALLOCATION	5498	211570	15182	71639	80444	43967	12157
UNEMPLOYMENT INS.		102		51	68	50	
WORKERS COMP. INS.		9490		2031	4559	3248	
PUBLIC LIABILITY INS.	473	438	123	175	455	105	1768
FIRE,EXT. COVERAGE & OTHER INS.	1234	977	172	515	588	227	4852
EMPLOYEE HEALTH INS.		4365		1571	2095	1746	
RETIREMENT & ACTUARIAL STUDY		18613		6700	8934	7445	
SALARY CONTINUATION		1115		409	545	363	
EMPLOYEE OPTICAL		404		157	209	130	
EMPLOYEE DENTAL		900		324	432	360	
EMPLOYEE SVC. AWARDS		51	9	26	34	26	51
DUMPING EXPENSE							
COMMUNICATIONS		4182	1338	2468	1671	1752	772
POUND SERVICES							
MOSQUITO ABATEMENT							
REFUNDS							
CONTRACTURAL SERVICES		1308	220	654	880	654	1308
UTILITIES	1629	1484	407	611	1580	382	8230
OTHER	16	472	92	185	185	134	560
ACCUMULATED OVERHEAD BEFORE SECONDARY ALLOCATION	8850	255471	17543	87516	102679	60589	29698

MISCELLANEOUS & FIXED EXPENSES	ACCOUNTING, PURCHASING DATA PROCESSING	REVENUE	BUILDING MAINT.	OTHER FUNDS	PLANNING	POLICE
OVERHEAD BEFORE PRIMARY ALLOCATION	88513	77333	224623		89231	476062
UNEMPLOYMENT INS.	68	68	120	361	51	102
WORKERS COMP. INS.	3997	4184	7274	24815	13782	7255
PUBLIC LIABILITY INS.	228	228	718	121257	1243	3062
FIRE,EXT. COVERAGE & OTHER INS.	1149	467	798	76466	2415	5201
EMPLOYEE HEALTH INS.	2794	2794	5238	7363	2256	4362
RETIREMENT & ACTUARIAL STUDY	11912	11912	22336	66103	9621	18601
SALARY CONTINUATION	752	752	1297	1201	557	240
EMPLOYEE OPTICAL	274	274	470	639	202	404
EMPLOYEE DENTAL	576	576	1079	1225	465	899
EMPLOYEE SVC. AWARDS	34	34	60	181	111	522
DUMPING EXPENSE						
COMMUNICATIONS	1759	1235	651	3781	5558	19767
POUND SERVICES						306
MOSQUITO ABATEMENT						
REFUNDS		449				
CONTRACTURAL SERVICES	880	880	1545	4636	2841	13374
UTILITIES	764	764	2485	2787	4333	10492
OTHER	195	180	620	2479	1044	3276
ACCUMULATED OVERHEAD BEFORE SECONDARY ALLOCATION	113895	102130	269314		133710	563925

MISCELLANEOUS & FIXED EXPENSES	FIRE	PUBLIC FACILITIES	PUBLIC WORKS	PARKS & RECREATION	LIBRARY	MUSEUM
OVERHEAD BEFORE PRIMARY ALLOCATION	267134	45929	77998	62123	138150	
UNEMPLOYMENT INS.	68	35	51	51	51	
WORKERS COMP. INS.	5066	1930	3421	2846	2979	
PUBLIC LIABILITY INS.	5110	24255	4252	6965	3552	577
FIRE,EXT. COVERAGE & OTHER INS.	6194	11490	2367	8044	12715	1140
EMPLOYEE HEALTH INS.	2989	1008	1725	2208	2292	
RETIREMENT & ACTUARIAL STUDY	12746	4706	9563	9413	9772	
SALARY CONTINUATION	29	262	554	556	554	
EMPLOYEE OPTICAL	38	125	203	204	203	
EMPLOYEE DENTAL	616	281	462	455	472	
EMPLOYEE SVC. AWARDS	428	95	275	241	137	9
DUMPING EXPENSE			2350	2349		
COMMUNICATIONS	4316	10340	5960	9230	2732	
POUND SERVICES						
MOSQUITO ABATEMENT			2324			
REFUNDS						
CONTRACTURAL SERVICES	10966	2437	7037	6152	3507	220
UTILITIES	10978	76946	29640	24996	11300	2005
OTHER	2513	1340	2488	1553	887	47
ACCUMULATED OVERHEAD BEFORE SECONDARY ALLOCATION	329191	181179	150670	137386	189303	3998

APPENDIX D--STATISTICAL DATA SUPORTING ALLOCATION BASES--(MONTEREY,CALIFORNIA,FISCAL YEAR 1979-1980)

PART 1-STATISTICS FOR PRIMARY ALLOCATION

NO.	DEPARTMENT /CENTER	EMPLOYEES		LABOR COST		EFFECTIVE LABOR HOURS[1]		R-H-D[2]	OPTICAL[3]	SALARY CONT.[4]
		#	%	$	%	#	%	%	%	%
1	MAYOR-COUNCIL	-	-	-	-	-	-	-	-	-
2	CITY MANAGER	6	2.20	144221	3.04	11127	2.23	2.5	3.1	4.3
3	FINANCE ADMIN	3	1.10	49114	1.04	5533	1.11	1.0	1.0	1.4
4	REVENUE	4	1.48	63335	1.34	7388	1.48	1.6	2.1	2.9
5	ACCOUNTING	4	1.48	60594	1.28	7439	1.49	1.6	2.1	2.9
6	CITY CLERK	3	1.10	30680	.65	5380	1.08	1.2	1.6	2.1
7	CITY ATTORNEY	4	1.48	69146	1.46	7196	1.44	1.2	1.6	2.1
8	MECHANICAL	6	2.20	96452	2.04	10949	2.20	2.5	3.1	4.3
9	PLANNING	9	3.30	195683	4.13	16787	3.37	3.5	4.1	5.7
19	PRINTING	1	.37	8413	.18	1795	.36	SEE#6	SEE#6	SEE#6
22	POLICE	61	22.50	1119792	23.63	109787	22.02	25.4	31.5	9.4
23	FIRE	50	18.45	961333	20.29	90098	18.07	21.4	3.6	1.4
24	PLANNING B.I.	4	1.48	76491	1.61	9429	1.89	2.1	2.6	3.6
25	PUBLIC WORKS (ADMIN)	3	1.10	70107	1.48	5379	1.08	1.2	1.6	2.1
26	ENGINEERING	7	2.60	137650	2.90	13002	2.61	3.0	3.6	5.0
27-30	STREETS	20	7.40	309684	6.54	35929	7.21	8.5	10.4	14.3
31	HARBOR	2	.74	36631	.77	3574	.72	1.0	1.0	1.4
32	BLDG. MAINT.	7	2.60	110382	2.33	12693	2.55	3.0	3.6	5.0
34	LIBRARY	16	5.90	241547	5.09	29145	5.85	7.0	8.3	11.4
35	P&R-PARKS	20	7.40	269843	5.69	35332	7.09	8.5	10.4	14.3
36	P&R-RECREATION	5	1.85	87450	1.85	9336	1.87	2.1	2.6	3.6
37	P&R-ADMIN	3	1.10	46069	.97	5577	1.12	1.2	1.6	2.1
38	PUBLIC FAC. (CONF. CTR.)	11	4.10	161364	3.40	20790	4.17	-	-	-
39	MUSEUM	1	.37	15456	.33	1775	.36	.5	.5	.7
40	MARINA	7	2.60	115145	2.43	12816	2.57	-	-	-
41	CEMETERY	3	1.10	55679	1.18	5393	1.08	-	-	-
42&52	PARKING	11	4.10	155585	3.28	24866	4.99	-	-	-
	CETA	-	-	50024	1.06	-	-	-	-	-
	TOTALS	271	100.10	4737870	100.00	498510	100.01	100.0	100.0	100.0

NO.	DEPARTMENT /CENTER	SQUARE FOOTAGE		ASSET VALUATION BLDG.		EQUIPMENT		BLDG. ACQUISITION /IMPROVEMENT COST	
		#	%	$	%	$	%	$	%
1	MAYOR-COUNCIL	2000	.27	89986	.49	55794	2.10	57442	.35
2	CITY MANAGER	1822	.25	90893	.50	24549	.93	5850	.04
3	FINANCE ADMIN	469	.06	21102	.12	5723	.22	13470	.08
4	REVENUE	938	.13	42203	.23	12992	.49	26940	.16
5	ACCOUNTING	938	.13	42203	.23	93537	3.52	26940	.16
6	CITY CLERK	750	.10	33745	.19	47266	1.78	21541	.13
7	CITY ATTORNEY	1940	.26	31327	.17	38154	1.44	7000	.04
8	MECHANICAL	7435	1.01	53192	.29	520163	19.60	10899	.07
9&53	PLANNING	2933	.39	137039	.75	14180	.53	24668	.15
19	PRINTING	500	.07	SEE #6		SEE #6		SEE # 6	
22	POLICE	12885	1.75	492524	2.70	122021	4.60	275024	1.66
23	FIRE	21541	2.92	644364	3.53	87530	3.29	265301	1.59
24	PLANNING B.I.	2338	.32	124572	.68	9488	.36	13242	.08
25	PUBLIC WORKS (ADMIN)	400	.05	17997	.09	3625	.14	11488	.07
26	ENGINEERING	1775	.24	79863	.44	25610	.97	50979	.31
27-30	STREETS	15807	2.14	87020	.48	65568	2.47	44260	.27
31	HARBOR	-	-	-	-	-	-	-	-
32	BLDG. MAINT.	3052	.41	87370	.48	6948	.26	53282	.32
34	LIBRARY	14986	2.03	658360	3.61	844052	31.80	302607	1.82
35	P&R-PARKS	1830	.25	59191	.32	90568	3.41	28503	.17
36	P&R-RECREATION	20023	2.72	549866	3.02	45727	1.72	186429	1.12
37	P&R-ADMIN	7429	1.01	194780	1.06	10397	.39	64591	.39
38	PUBLIC FAC. (CONF. CTR.)	102194	13.86	7925398	43.47	374634	14.12	8120632	48.89
39	MUSEUM	2462	.33	128432	.70	6223	.23	13652	.08
40	MARINA	143146	19.41	2079559	11.41	14380	.54	2592864	15.61
41	CEMETERY	9955	1.35	172039	.94	SEE #35		127338	.77
42&52	PARKING	357851	48.53	4387633	24.07	134503	5.07	4266469	25.68
	TOTALS	737399	100.02	18230658	100.00	2653632	100.00	16611411	100.01

NO.	DEPARTMENT /CENTER	COMMUNICATIONS AVG. ANNUAL BILL %	ACCOUNTING TRANSACTIONS #	ACCOUNTING TRANSACTIONS %	1979-1980 APPROPRIATIONS $	1979-1980 APPROPRIATIONS %	CITY ATTORNEY STAFF HOURS[5] #	CITY ATTORNEY STAFF HOURS[5] %	UTILITIES[6] $
1	MAYOR-COUNCIL	-	30	.91	8000	.09	468	6.50	1629
2	CITY MANAGER	6.23	137	4.17	230286	2.58	1079	15.00	1484
3	FINANCE ADMIN	2.61	22	.67	65459	.73	720	10.00	382
4	REVENUE	1.84	42	1.28	87675	.98	720	10.00	764
5	ACCOUNTING	2.62	45	1.37	95390	1.07	-	-	764
6	CITY CLERK	5.67	27	.82	90245	1.01	360	5.00	1018
7	CITY ATTORNEY	2.49	33	1.00	90475	1.01	-	-	1580
8	MECHANICAL	1.15	175	5.33	273617	3.07	-	-	-
9&53	PLANNING	6.57	96	2.92	400784	4.49	1439	20.00	4333
19	PRINTING	SEE#6	21	.64	44919	.50	-	-	-
22	POLICE	29.45	159	4.84	1599931	17.95	1079	15.00	10492
23	FIRE	6.43	144	4.38	1227472	13.77	180	2.50	10978
24	PLANNING B.I.	1.71	32	.97	108825	1.22	-	-	-
25	PUBLIC WORKS (ADMIN)	3.20	31	.94	84201	.94	180	2.50	29640
26	ENGINEERING	1.94	50	1.52	177551	1.99	SEE #25		SEE #25
27-30	STREETS	3.74	189	5.75	860084	9.65	" " "		" " "
31	HARBOR	SEE#40	61	1.86	93354	1.05	" " "		" " "
32	BLDG. MAINT.	.97	158	4.81	302726	3.39	180	2.50	2485
34	LIBRARY	4.07	317	9.65	433356	4.86	180	2.50	11300
35	P&R-PARKS	3.59	100	3.04	407780	4.57	360	5.00	24996
36	P&R-RECREATION	6.05	186	5.66	286307	3.21	SEE # 35		SEE # 35
37	P&R-ADMIN	4.11	29	.88	64500	.72	" " "		" " "
38	PUBLIC FAC. (CONF. CTR.)	-	297	9.04	654207	7.33	180	2.50	76946
39	MUSEUM	.91	20	.61	23158	.26	72	1.00	2005
40	MARINA	2.19	75	2.28	494610	5.54	-	-	-
41	CEMETERY	-	34	1.04	78890	.88	-	-	-
42&52	PARKING	2.46	107	3.25	636818	7.14	-	-	-
	OTHER	-	668	20.33	-	-	-	-	-
	TOTALS	100.00	3285	100.00	8910620	100.00	7196	100.00	180796

NO.	DEPARTMENT /CENTER	CIVIC CENTER COMPLEX SQUARE FEET	USE ALLOWANCE 2% OF ACQUISITION COST $
1	MAYOR-COUNCIL	2000	1149
2	CITY MANAGER	1822	117
3	FINANCE ADMIN	469	269
4	REVENUE	938	539
5	ACCOUNTING	938	539
6	CITY CLERK	1250	431
7	CITY ATTORNEY	1940	140
8	MECHANICAL	-	218
9	PLANNING	5321	493
19	PRINTING	SEE #6	-
22	POLICE	12885	5500
23	FIRE	7563	5306
24	PLANNING B.I.	SEE #9	265
25	PUBLIC WORKS (ADMIN)	2175	230
26	ENGINEERING	SEE #25	1020
27-30	STREETS	" " "	985
31	HARBOR	" " "	-
32	BLDG. MAINT.	3052	1066
34	LIBRARY	-	6052
35	P&R-PARKS	2310	570
36	P&R-RECREATION	SEE #35	3729
37	P&R-ADMIN	" " "	1292
38	PUBLIC FAC. (CONF. CTR.)	-	152413
39	MUSEUM	2462	273
40	MARINA	-	51857
41	CEMETERY	-	2546
42&52	PARKING	-	85329
	TOTAL	45125	322328

PART 2-STATISTICS FOR SECONDARY ALLOCATION

NO.	DEPARTMENT /CENTER	ACCUMULATED COST		1979-1980 APPROPRIATIONS		ACCOUNTING TRANSACTIONS		SQUARE FOOTAGE		CITY ATTORNEY STAFF HOURS[5]	
		$	%	$	%	#	%	#	%	#	%
9&24	PLANNING	133710	7.91	509609	7.94	128	7.48	5271	2.55	1439	39.21
22	POLICE	563925	33.38	1599931	24.92	159	9.29	12885	6.24	1079	29.40
23	FIRE	329191	19.49	1227472	19.12	144	8.42	21541	10.43	180	4.90
25-31	PUBLIC WORKS	150670	8.92	1215190	18.92	331	19.35	17982	8.70	180	4.90
34	LIBRARY	189303	11.21	433356	6.75	317	18.53	14986	7.25	180	4.90
35-37	PARKS & REC.	137386	8.13	758587	11.81	315	18.41	29282	14.17	360	9.81
38	PUBLIC FAC.	181179	10.72	654207	10.19	297	17.36	102194	49.46	180	4.90
39	MUSEUM	3998	.24	23158	.36	20	1.17	2462	1.19	72	1.96
	TOTALS	1689362	100.01	6421510	100.01	1711	100.01	206603	100.01	3670	100.01

NOTES: 1) EFFECTIVE LABOR HOURS=(2080-HOLIDAYS-AVG.SICK LEAVE-AVG. VACATION DAYS) X # OF EMPLOYEES
2) RETIREMENT-HEALTH-DENTAL, 236 PARTICIPANTS
3) 193 PARTICIPANTS
4) 140 PARTICIPANTS
5) BASED ON ESTIMATES PROVIDED BY THE CITY ATTORNEY
6) ACCOUNT #211 DISTRIBUTED TO DEPARTMENTS INDICATED IN CIVIC CENTER BASED ON SQUARE FOOTAGE. ALLOCATIONS NOT MADE WHERE THE COSTS ARE LODGED DIRECTLY.

APPENDIX E

Appendix I –*SAMPLE COST ALLOCATION PLAN FORMATS*

Page No.

1. *CENTRAL SERVICE COST ALLOCATION PLAN*

Exhibit A	Summary of Allocated Central Service Costs	49
Schedule A-1	Allocation of Costs, Personnel Department	50
Schedule A-2	Costs to be Allocated, Personnel Department	51
Schedule A-3	Statement of Function and Benefit, Personnel Department	52
Exhibit A-1	Summary of Central Services Billed to User Organizations	53

2. *INDIRECT COST RATE PROPOSALS*

Exhibit B	Short Form Method	54
Exhibit C	Simplified Method	56
Exhibit D	Alternate Simplified Method	59
Exhibit E	Multiple Rate Method	63

3. *CONSOLIDATED LOCAL CENTRAL SERVICE COST ALLOCATION PLAN AND INDIRECT COST PROPOSAL*

Exhibit F	Sample Proposal	67

CENTRAL SERVICE COST ALLOCATION PLANS
DESCRIPTION OF EXHIBIT A

This exhibit is a sample illustration of a central service cost allocation plan. It consists of:

Exhibit A—Summary of Allocated Central Service Costs. This exhibit shows each central service, and the attendant costs, which benefit Federal grants and contracts and for which a State or local government wishes to make a claim. This exhibit must be supported by detailed schedules comparable to A.1-A.3 for each included central service.

Schedule A-1—Allocation of Costs, Personnel Department. The personnel department has been selected as an illustrative central service. This schedule shows those State or organizations to which the personnel department provides services and the allocation of its costs to those organizations. This schedule is supported by Schedules A-2 and A-3.

Schedule A-2—Costs to be Allocated, Personnel Department. This schedule shows the composition of the costs of the personnel department as contained in official financial or budget statements and a reconciliation of those costs with the amount allocated in Schedule A-1.

Schedule A-3—Statement of Function and Benefit, Personnel Department. This schedule is a narrative description of the activities conducted by the personnel department, their necessity (benefits) to the successful performance of federally supported programs, a description of the base(s) selected to distribute the costs of those activities to the organizations to which services are rendered and the rationale for the base(s) selected.

Exhibit A-1—Summary of Central Services Billed. It is common practice for central service departments to bill those organizations to which they render services for the cost of those services. This Exhibit illustrates the services billed to organizations conducting Federal grants and contracts, the costs included in the billing, the methodology for computing the billing rate, etc.

Amounts allocated to the operating departments from the central service cost allocation plan in Exhibits A and A-1, are carried forward to Exhibits B, C, D, and E which illustrate various sample formats for an indirect cost rate proposal.

Only a few of the many possible central services have been shown in Exhibit A and only one central service department is shown in the accompanying Schedules A-1 through A-3. A central service cost allocation plan may include any other services and their attendant costs which are allowable under FMC 74-4 and for which documentation can be provided. Each type of cost claimed should be supported by appropriate schedules and other documentation sufficient to provide a reasonable basis for evaluation and acceptance.

EXHIBIT A

SAMPLE FORMAT

CENTRAL SERVICE COST ALLOCATION PLAN*
SUMMARY OF ALLOCATED CENTRAL SERVICE COSTS
FOR THE FISCAL YEAR ENDED JUNE 30, 19 - -

Department/Operating Unit	Central Service Organizations				Total Allocated Costs (b)
	Personnel (a)	Accounting	Purchasing	Audit	
Health	$ 9,945	$ 20,145	$ 3,412	$ 1,675	$ 35,177
Environmental Services	8,907	21,622	2,221	1,221	33,971
Social Services	3,187	7,984	896	645	12,712
Highway	15,132	42,855	6,751	6,227	70,965
Police	29,848	51,960	9,475	11,421	102,704
Fire	24,873	49,743	9,997	14,526	99,139
Other Departments	57,048	187,608	21,431	18,654	284,741
TOTALS	$148,940	$381,917	$54,183	$54,369	$639,409

(a) Allocated amounts shown are from Schedule A-1. In an actual plan, the remaining service departments would similarly need to be supported by separate schedules showing the computation of the allocated amounts.

(b) These amounts are includable in the indirect cost proposals of the individual operating Departments/units. See Exhibits B, C, D, and E.

*This is a sample only and hence, is brief and simple. In practice, a State or local government may wish to claim more or less activities as charges to Federally supported programs and this Exhibit and its supporting schedules would need to be modified accordingly.

SCHEDULE A-1

SAMPLE FORMAT*

CENTRAL SERVICE COST ALLOCATION PLAN
ALLOCATION OF COSTS, PERSONNEL DEPARTMENT
FOR THE FISCAL YEAR ENDED JUNE 30, 19--

Department/Unit	Number of Employees (a)	Percent	Allocation (c)
Health	188	6.61	$ 9,945
Environmental Services	170	5.98	8,907
Social Services	61	2.14	3,187
Highway	289	10.16	15,132
Police	570	20.04	29,848
Fire	475	16.70	24,873
Other Departments (b)	1,091	38.37	57,048
Total	2,344	100.00	$148,940

(a) Allocation base must include all employees of all operating departments that are serviced by the personnel department.
(b) Those departments that do not perform Federal programs may be grouped together.
(c) Allocated amounts are carried forward to summary schedule in Exhibit A. The total of $148,940 comes from Schedule A-2.

*This is a sample only and, accordingly, is brief and simple. In practice, the type and level of service provided by the personnel department to the various organizations served may require a separate allocation for each service or to different organizations served.

SCHEDULE A-2

SAMPLE FORMAT*

CENTRAL SERVICE COST ALLOCATION PLAN
COSTS TO BE ALLOCATED, PERSONNEL DEPARTMENT
FOR THE FISCAL YEAR ENDED JUNE 30, 19--

Salaries and Wages		$140,000
Fringe Benefits		16,000
Supplies		8,000
Travel		7,012
Maintenance & Janitorial Services		7,928
Capital Outlay		7,561
		$186,501
Less: Unallowable Costs, Capital Outlay	$ 7,561	
Costs Chargeable to Federal Grant (b)	30,000	37,561
Total Costs to be allocated on Schedule A-1		$148,940 (a)

(a) The costs allocated must be reconciled to appropriate financial documents, either financial statements, budgets or a combination of both. In this example the government's base data was cost incurred for its most recent fiscal year.

(b) Represents charges to a Federal grant awarded to assist the State or local government to improve its personnel system. If a supporting agency received an award from the Federal Government, all costs incurred in connection with the award (including any costs that are required for matching or cost sharing) must be eliminated prior to the distribution of the supporting agency's costs to the user departments or agencies.

*This is a sample only and hence, is brief and simple. In practice, this schedule should be sufficiently detailed to show the costs of major activities, branches, etc. of the personnel departments in a manner permitting a reasonable assessment of the costs claimed against Federal programs.

SCHEDULE A-3

SAMPLE FORMAT*

CENTRAL SERVICE COST ALLOCATION PLAN
STATEMENT OF FUNCTION & BENEFIT, PERSONNEL DEPARTMENT
FOR THE FISCAL YEAR ENDED JUNE 30, 19--

The personnel department is responsible for overall administration of the Civil Service program. This includes recruiting, interviewing, testing and referring potential candidates for the more than 2,000 municipal jobs.

The personnel department administers the classifications and salary programs and is responsible for recommending personnel policies and procedures to the Civil Service Commission for approval.

The department is involved in the design of the various employee benefit programs. After installation, the department reviews and maintains the records on these programs.

Active and inactive personnel records are maintained on all municipal employees.

The personnel department is responsible for maintaining the safety program (including workmen's compensation and injury level) and the city training programs.

All functions and services performed by the personnel department benefit all departments of the city. Federal programs are benefited because city employees are hired to work in these programs. Therefore, the costs of the personnel department have been distributed to all departments of the city.

The basis for allocation is the number of employees per department. The base data is readily available and verifiable. All employees receive essentially the same type and level of services. Hence, this base reflects that condition by distributing the total cost of providing these services to each department in proportion to its relative number of employees.

*This is a sample only and hence, is brief and simple. In practice, this schedule should be sufficiently detailed to provide narrative explanations of the functions and benefits associated with the costs being allocated.

EXHIBIT A-1

SAMPLE FORMAT*

CENTRAL SERVICE COST ALLOCATION PLAN
SUMMARY OF CENTRAL SERVICES BILLED TO USER ORGANIZATIONS

Motor Pool	The (State or local government) operates a central motor pool which makes cars, trucks and buses available to user departments. User departments are billed for each mile driven: cars-15 cents per mile; trucks-25 cents per mile; and buses-30 cents per mile. The basis for the charge is the most recent study of cost per mile driven, performed by the internal audit staff. Any over or under recovery is applied to the next year's expected expenditures and is included in that year's billing rate. The costs included are salaries and wages and fringe benefits of motor pool personnel, their travel, supplies and parts and use charges for equipment and buildings and vehicles determined in accordance with FMC 74-4.
Data Processing	The State (or local government) operates a central computer center consisting of an IBM system 370/115, and Control Data 3100 and Cyber 70 series configuration. The center provides both regular continuing and special job computer support to most operating and staff departments. Billings for services are made to user organizations based on a standard price schedule. The price schedule is related to, and, designed to recover the costs of various types of jobs on each system. It is revised quarterly and audited annually by the internal audit department. Profits or losses are carried forward and used to adjust price schedules of ensuing quarterly billing rates. Costs consists of salaries and wages and fringe benefits of center personnel, supplies, maintenance and utilities, and straight line depreciation of equipment based on a fifteen year life.
Long Distance Telephone	All long distance telephone calls are placed through a central switchboard and are billed to the organizations making the call.

NOTES

If a direct billing mechanism is used by the government, then all users must be billed. Billing of selected departments and allocation of residual amounts through the cost allocation plan to remaining departments results in inequitable costing and is not acceptable. However, if all users are billed, residual amounts may be allocated through the allocation plan provided they are not material and the allocation base is equitable.

A detailed breakdown of costs is not normally required as a part of this exhibit. However, the submitting State or local government must have and make available to the Federal cognizant agency such cost and revenue breakdowns, utilization records and other information as is necessary to permit a reasonable assessment of the costs incurred and charges made.

*This is a sample only, and hence, is brief and simple. In practice, the number and types of services billed may be greater than shown here and may require more extensive description and explanation.

DESCRIPTION OF EXHIBIT B

Exhibit B illustrates the computation of indirect costs for programs operated within a department using the short form method. The costs of the department are categorized as indirect costs, direct costs (salaries and wages and other) and expenditures not allowable. The short-form method is the least complex of the various methods of computing departmental indirect cost rates. This method is used in those instances where indirect costs at the division or bureau level are not identified. Thus, all costs incurred at the division or bureau level are treated as direct costs. If division or bureau level indirect costs can be identified, the simplified method (Exhibit C), the alternate simplified method (Exhibit D) or the multiple rate method (Exhibit E) may be used.

EXHIBIT B

SAMPLE FORMAT

DEPARTMENT OF ENVIRONMENTAL SERVICES
INDIRECT COST RATE PROPOSAL–SHORT FORM METHOD*
FOR THE FISCAL YEAR ENDED JUNE 30, 19--

	Total Costs Incurred (a)	Excludable Costs (b)	Unallowable Costs (c)	Direct Costs Salaries & Wages (d)	Direct Costs Other	Indirect Costs
Divisions/Bureaus						
Air Quality and Noise	$2,158,100	$1,300,000	$ 21,900	$ 260,100	$ 76,100	
Community Environmental Control	245,200		12,200	187,300	45,200	
Water Quality Management	255,400		9,600	196,700	49,100	
Solid Waste Disposal	642,300		51,000	476,100	115,200	
Parks and Forests	283,700		11,500	216,300	55,900	
Departmental Indirect Costs						
Office of the Director	35,600		1,000			$ 34,600
Financial Management	56,000					56,000
Administrative Services	61,100		500			60,600
Equipment Use	1,000					1,000
Central Service Cost Allocation Plan(e)						
Personnel	8,907					8,907
Accounting	21,622					21,622
Purchasing	2,221					2,221
Audit	1,221					1,221
Total Costs	$3,772,371	$1,300,000	$107,700	$1,337,000	$341,500	$186,171

Rate Calculation

Indirect Costs $ 186,171 / Direct Salaries and Wages $1,337,000 = 13.92%

*This is a sample only and is not intended to prescribe methods of charging costs.

Notes to Exhibit B

(a) Total departmental costs. This amount should be reconciled to the financial statements or other supporting documentation submitted with the proposal and would include costs billed from the Central Plan as well as departmental billed costs (Billed costs should be in compliance with Exhibit A-1).

(b) Under some Federal programs funds are provided to a grantee and subsequently passed through to another organization which actually performs the program for which the funds are provided. There is no measurable involvement by the grantee in the use or administration of the funds. This example illustrates such a situation. Since these funds, which are recorded as a cost in the records of the department do not reflect the expenditure of resources, they are excluded from the computation. However, if the grantee does in fact incur a significant amount of costs in administering the grant, then it should be assessed for its equitable share of indirect costs. This column would be normally used by States only and not by local governments.

(c) Expenditures not allowable. This amount represents costs of capital expenditures and other costs which are unallowable under FMC 74-4. Unallowable costs must be allocated their share of indirect costs if they either generated or benefited from the indirect costs. In this example this is not the case.

(d) Salaries and wages. This amount is set out simply because it is the base upon which the indirect cost rate is calculated.

(e) Central Service Cost Allocation Plan Costs. The amounts shown as allocated must agree with the amounts shown on the Central Service Cost Allocation Plan (see Exhibit A.)

DESCRIPTION OF EXHIBIT C

Exhibit C illustrates the distribution of indirect costs of a State or local government department, the division/bureaus of the department and the cost of central services provided to it. Exhibit C differs from Exhibit B in that recognition is given to the indirect costs within each division. Under the Short Form Method illustrated in Exhibit B, where indirect costs are not identified at the division or bureau level, all costs are treated as direct costs. Under the Simplified Method shown in this Exhibit, indirect costs are identified at the division or bureau level, and are so indicated. This method may be used if the ratio of the indirect costs to direct salaries and wages (or other selected base) of each division or bureau reasonably approximates the ratio of the other divisions or is otherwise not inequitable to the Federal government. If, the indirect/direct ratio varies significantly between divisions or bureaus, the Alternate Simplified Method (Exhibit D) or the Multiple Rate Method (Exhibit E) should be used.

EXHIBIT C

SAMPLE FORMAT

DEPARTMENT OF ENVIRONMENTAL SERVICES
INDIRECT COST RATE PROPOSAL–SIMPLIFIED METHOD*
FOR THE FISCAL YEAR ENDED JUNE 30, 19--

	Total (e)	Exclusions (a)	Expenditures Not Allowable (b)	Indirect Costs (d)	Direct Costs (c) Direct Salaries & Wages	Direct Costs (c) Expenditures For All Other Purposes
Division/Bureau						
Air Quality and Noise	$2,149,100	$1,300,000	$ 21,900	$ 28,100	$ 235,400	$ 63,700
Community Environmental Control	245,200		12,200	20,100	170,000	42,900
Water Quality Management	255,400		9,600	21,000	178,100	46,700
Solid Waste Disposal	642,300		51,000	50,900	431,000	109,400
Parks and Forests	283,700		11,500	23,200	195,900	53,100
	$3,575,700	$1,300,000	$106,200	$143,300	$1,210,400	$315,800
Departmental Indirect Costs						
Office of the Director	35,600			35,600		
Financial Management	56,000			56,000		
Administrative Services	62,100			62,100		
Equipment Use	9,000			9,000		
	$3,738,400	$1,300,000	$106,200	$306,000	$1,210,400	$315,800
Services Furnished (But Not Billed) By Other Government Agencies (f)						
Personnel	8,907			8,907		
Accounting	21,622			21,622		
Purchasing	2,221			2,221		
Audit	1,221			1,221		
	$3,772,371	$1,300,000	$106,200	$339,971	$1,210,400	$315,800

Notes to Exhibit C

(a) Under some Federal programs funds are provided to a grantee and subsequently passed through to another organization actually performs the program for which the funds are provided. There is no measurable involvement by which the grantee in the use of administration of the funds. This example illustrates such a situation. Since these funds, which are recorded as a cost in the records of the department do not reflect the expenditure of resources, they are excluded from the computation. However, if the grantee does in fact incur a significant amount of costs in administering the grant, then it should be assessed for its equitable share of indirect costs. This column is normally used by States only and not local governments.

(b) Expenditures not allowable. This amount represents costs or capital expenditures and costs, whether direct or indirect, which are unallowable in accordance with the cost principles. Although a cost may be unallowable if it either generated or benefited from the indirect costs, it should be moved to the base (providing it is salaries and wages in this example) and allocated its share of indirect costs.

(c) Under the Simplified Method, a determination is made as to which activities are direct, illustrates under the heading Direct Costs, and which are indirect, illustrated under the heading Indirect Costs.

(d) Once the determination of direct/indirect has been made, a ratio should be determined for each division/bureau as shown in the following calculation:

Division/Bureau	Indirect Costs	Direct Salaries and Wages	Ratio
Air Quality & Noise	$28,100	$235,400	11.94%
Community Environmental Control	20,100	170,000	11.82%
Water Quality Management	21,000	178,100	11.79%
Solid Waste Disposal	50,900	431,000	11.81%
Parks & Forests	23,200	195,900	11.84%

In this illustration, the dollar amounts of indirect costs differ significantly between division or bureaus; however, when individually expressed as a percentage of direct salaries and wages the differences are minor. Therefore, a single overall rate for the department may be computed by adding the departmental indirect costs and the costs incurred by other government agencies and allocating the indirect cost pool over a single base.

(e) Total departmental costs. This amount should be reconciled to the financial statements or other supporting documentation included in the proposal.

(f) Costs incurred by other government agencies. This amount must agree with the amounts shown on the central service Cost Allocation Plan (see Exhibit A.) In this illustration, costs of $33,971 represents costs of central services allocated to the entire department. Government-wide services that are billed directly to departments or to programs must also be documented in the cost allocation plan (See Exhibit A-1).

*This is a sample only and is not intended to prescribe methods of charging costs.

DESCRIPTION OF EXHIBIT C-1

The totals from Exhibit C are brought forward to this Exhibit. The indirect cost rate is expressed as a percentage resulting from the ratio of the allowable indirect costs ($339,971) to the direct salaries and wages ($1,210,400.)

EXHIBIT C-1

SAMPLE FORMAT

DEPARTMENT OF ENVIRONMENTAL SERVICES
INDIRECT COST RATE PROPOSAL–SIMPLIFIED METHOD*
FOR THE FISCAL YEAR ENDED JUNE 30, 19--

Total	Exclusions & Expenditures Not Allowable	Indirect Costs	Direct Salaries & Wages	Other Direct Expenditures
$3,772,371	$1,906,200	$339,971 (A)	$1,210,400 (B)	$315,800

(A) divided by (B) = $\frac{\$\ 339,971}{\$1,210,400}$ = Indirect cost rate of 28.09% of direct salaries and wages excluding fringe benefits.

Treatment of Fringe Benefits

In this example, fringe benefits applicable to direct salaries and wages are treated as direct costs.

*This is a sample only and is not intended to prescribe methods of charging costs.

DESCRIPTION OF EXHIBIT D

This method illustrates the distribution of indirect costs to functional divisions or bureaus in order to determine separate indirect cost rates for each division or bureau. This method provides more definitive costing in those instances where, indirect effort at the division or bureau level is material in amount and differs sufficiently from division to division to warrant a more precise method of costing than shown in the simplified method in Exhibit C.

This computation recognizes indirect costs of (1) each division or bureau, (2) the department, and (3) services furnished (but not billed) by other local government agencies. Indirect costs at the department level and central service level are allocated to the divisions or bureaus on a single base. A rate is then developed for each of the divisions or bureaus by relating the indirect costs of each division or bureau to the selected basis for allocation for each division or bureau.

EXHIBIT D

SAMPLE FORMAT

INDIRECT COST RATE PROPOSAL-ALTERNATE SIMPLIFIED METHOD*
DEPARTMENT OF ENVIRONMENTAL SERVICES
FOR THE FISCAL YEAR ENDED JUNE 30, 19--

	Totals (g)	Exclusions (f)	Departmental Indirect Costs	Allocation To Divisions/ Bureaus	Division/Bureaus: Air Quality and Noise	Community Environmental Control	Water Quality	Solid Waste Disposal	Parks and Forests
Expenditures Not Allowable (a)	$ 106,200				$ 21,900	$ 12,200	$ 9,600	$ 51,000	$ 11,500
Direct Salaries and Wages (b)	1,164,700				251,500	178,000	184,700	375,000	175,500
Other Direct Expenditures (b)	2,097,700	$1,800,000			63,700	42,900	46,700	98,400	46,000
Division/Bureau Indirect Costs (b)	207,100				12,000	12,100	14,400	117,900	50,700
Departmental Indirect Costs									
Office of the Director			$ 35,600						
Financial Management			56,000						
Administrative Services			62,100						
Equipment Use			9,000						
Total Departmental Indirect Costs (c)	162,700		162,700	($162,700)	35,133	24,865	25,801	52,385	24,516
Total Departmental Costs	$3,738,400	$1,800,000			$ 384,233	$ 270,065	$ 281,201	$ 694,685	$ 308,216
Services Furnished (But Not Billed) By Other Government Agencies (d)									
Personnel	$ 8,907								
Accounting	21,622								
Purchasing	2,221								
Audit	1,221								
Total Services Furnished (But Not Billed) By Other Government Agencies (d)	$ 33,971			($ 33,971)	$ 7,336	$ 5,192	$ 5,387	$ 10,937	$ 5,119
Total Costs	$3,772,371	$1,800,000			$ 391,569	$ 275,257	$ 286,588	$ 705,622	$ 313,335
Total Indirect Costs (e)	$ 403,771				$ 54,469	$ 42,157	$ 45,588	$ 181,222	$ 80,335

Indirect Cost Rates (See Note (e))	Indirect Costs (e)	Salary and Wages (b)	Ratio
Air Quality and Noise	$ 54,469	$ 251,500	21.66%
Community Environmental Control	42,157	178,000	23.68%
Water Quality	45,588	184,700	24.68%
Solid Waste Disposal	181,222	375,000	48.33%
Parks and Forest	80,335	175,500	45.77%
Total	$403,771	$1,164,700	

*This is a sample only and is not intended to prescribe methods of charging costs.

Notes to Exhibit D

(a) Expenditures not allowable. This amount represents costs of capital expenditures and both direct and indirect costs which are unallowable in accordance with the cost principles. Although a direct cost may be unallowable, it should be allocated its share of indirect costs if it either generated or benefited from the indirect costs.

(b) A determination is made as to which functions are direct and which are indirect at the division or bureau level. Next, direct salaries and wages are separately identified from other direct expenditures. An analysis is made to determine the ratio of indirect costs to direct salaries and wages to determine the amount of variance between divisions and bureaus:

Division/Bureau	Divisional Indirect Costs	Direct Salaries and Wages	Ratio
Air Quality and Noise	$ 12,000	$ 251,500	4.77%
Community Environmental Control	12,100	178,000	6.80%
Water Quality	14,400	184,700	7.80%
Solid Waste Disposal	117,900	375,000	31.44%
Parks and Forests	50,700	175,500	28.89%
Totals	$207,100	$1,164,700	17.78%

The difference in the rates of indirect costs incurred per division or bureau when related to the direct salaries and wages are significant enough to preclude the use of a single department-wide rate. Separate pools should be established for each division or bureau and a portion of the central service costs and departmental indirect costs allocated to each pool.

(c) In this example, departmental indirect costs are allocated to the division or bureaus on the basis of direct salaries and wages incurred in each division or bureau.

	Direct Salaries and Wages	Percent of Total	Departmental Indirect Costs	Allocated Amount
Air Quality and Noise	$ 251,500	21.6%	$162,700	$ 35,133
Community Environmental Control	178,000	15.3%	162,700	24,865
Water Quality	184,700	15.8%	162,700	25,801
Solid Waste Disposal	375,000	32.2%	162,700	52,385
Parks and Forests	175,500	15.1%	162,700	24,516
Totals	$1,164,700	100.0%		$162,700

(d) Costs incurred by other governmental agencies are allocated to the divisions or bureaus on the basis of direct salaries and wages.

	Direct Salaries and Wages	Percent of Total	Departmental Indirect Costs	Allocated Amount
Air Quality and Noise	$ 251,500	21.6%	$ 33,971	$ 7,336
Community Environmental Control	178,000	15.3%	33,971	5,192
Water Quality	184,700	15.8%	33,971	5,387
Solid Waste Disposal	375,000	32.2%	33,971	10,937
Parks and Forests	175,500	15.1%	33,971	5,119
Totals	$1,164,700	100.0%		$ 33,971

Notes to Exhibit D (Continued)

(e) Total indirect costs include (1) division/bureau indirect costs (2) departmental indirect costs, and (3) services furnished (but not billed) by other government agencies. The total indirect expenses for each division or bureau are carried forward to Exhibit D, where the relationship between the indirect expenses and the direct salaries and wages of each division or bureau is used to develop indirect cost rates.

(f) Under some Federal programs, funds are provided to a grantee and subsequently passed through to another organization which actually performs the program for which the funds are provided. There is no measurable involvement by the grantee in the use or administration of the funds. This example illustrates such a situation. Since these funds, which are recorded as a cost in the records of the department do not reflect the expenditure of resources, they are excluded from the computation. However, if the grantee does in fact incur a significant amount of costs in administering the grant, then it should be assessed for its equitable share of indirect costs. This column would be normally used by States only and not by local governments.

(g) This amount should be reconciled to the financial statements or other supporting documentation submitted with the proposal.

DESCRIPTION OF EXHIBIT E

Exhibit E illustrates the distribution of indirect costs on a multiple allocation basis to each division or bureau within a Department. This method results in more definitive costing and is for use when operating differences between divisions or bureaus result in material differences in the use of resources and in costs.

The computation recognizes (1) the indirect costs of each division or bureau, (3) department level administration, and (3) the cost of services furnished by other government agencies and approved through the central service cost allocation plan. These costs are allocated to the divisions or bureaus on bases which most fairly give effect to the extent to which they benefit from or generate the costs. For example, the costs of purchasing services is allocated on the number of purchase orders issued while the costs of personnel administration is allocated on the number of employees serviced.

Indirect costs allocated from the department level and from the central service plan are added to the indirect costs incurred by each division or bureau to arrive at total indirect costs for each of the divisions or bureaus. As in the method described in Exhibit D, a rate is developed for each division or bureau by relating its indirect costs to its salaries and wages or other selected base.

EXHIBIT E

SAMPLE FORMAT

DEPARTMENT OF ENVIRONMENTAL SERVICES
INDIRECT COST RATE PROPOSAL-MULTIPLE RATE METHOD*
FOR THE FISCAL YEAR ENDED JUNE 30, 19--

	Allocation Base (a)	Total Indirect Costs (b)	Services Furnished by Other Gov't Agencies (c)				Departmental Costs (d)				
			Personnel	Accounting	Purchasing	Audit	Equipment	Financial Mgmt.	Admin. Services	Director	Total (g)
Services Furnished (But Not Billed) By Other Government Agencies (e)											
Personnel	Number of Employees	$ 8,907	($8,907)								
Accounting	Number of Employees (f)	21,622		($21,622)							
Purchasing	Number of Purchase Orders	2,221			($2,221)						
Audit	Number of Audit Hours	1,221				($1,221)					
Subtotal		$ 33,971									
Departmental Indirect Costs											
Equipment Use	User of Equipment	$ 9,000					(9,000)				
Financial Mgmt.	Transaction Processed	56,000						(56,000)			
Admin. Services	Direct Salaries & Wages	62,100							($62,100)		
Director's Office	Direct Salaries & Wages	35,600								($35,600)	
Subtotal		$162,700									
Division/Bureau											
Air Quality & Noise		$ 28,100	$ 1,692	$ 4,108	$ 333	$ 98	$ 200	$ 8,960	$11,799	$ 6,764	$ 62,054
Environ. Control		20,100	1,246	3,027	333	98	400	11,200	8,694	4,984	50,082
Water Quality		21,000	1,157	2,811	222	98	400	8,960	8,694	4,984	48,326
Solid Waste Disposal		50,900	3,562	8,649	1,111	610	7,200	15,120	21,735	12,460	121,347
Parks & Forest		23,200	1,157	2,811	155	195	800	8,400	9,936	5,696	52,350
Plant Construction		15,200	93	216	67	122	0	3,360	1,242	712	21,012
Subtotal		$158,500									
Totals		$355,171	-0-	-0-	-0-	-0-	-0-	-0	-0-	-0-	$355,171

*This is a sample only and is not intended to prescribe methods of charging costs.

Notes to Exhibit E

(a) The allocation bases used were selected as reasonable and applicable under the circumstances. Other basis could be just as acceptable if they represented a fair measure of cost generation or cost benefit.

(b) The costs in this column must be reconciled to official financial statements. In this illustration, it is assumed that all costs incurred are allowable and relevent in accordance with FMC 74-4. To the extent that unallowable or excludable (See Exhibit B Note (b)) costs are included therein, a separate column should be added to the schedule to show the amounts and adjustments made.

(c) The costs of services furnished (but not billed) by other government agencies which are derived through the central service cost allocation plan, are allocated to each functional division or bureau. This allocation could be made more precise by allocating the costs to each departmental administrative function e.g., to financial management, administrative services, etc., and to the divisions or bureaus. The indirect costs of each departmental administrative service plus its allocated amount of central service costs would then be allocated to the divisions or bureaus. If the result of such allocations would have a material effect on the rates computed, the more precise method should be used. In the example presented, the dollar effect is not sufficiently material to warrant this level of precision.

(d) Departmental indirect costs are allocated to each division or bureau. As with services furnished by other Federal agencies, explained in Note (c), the allocation of certain departmental indirect costs, such as equipment use charges could have been allocated to other departmental administrative functions, if the results of such allocation would have had a material effect on the rates to be computed. In the example presented, the dollar effect is not sufficiently material to warrant the additional allocations.

(e) The costs of services furnished (but not billed) by other government agencies is derived from the central service cost allocation plan shown in Exhibit A. In addition to the listed unbilled services, the department also received services from other organizations for which it is billed at rates approved through the central service cost allocation plan (See Exhibit A-1). This illustration assumes that these billed costs are already recorded in the accounting records of the department and included in the column—total indirect costs, or treated as a direct cost.

(f) Accounting services rendered by other agencies are allocated to the divisions or bureaus on the basis of number of employees. In this illustration, the accounting services provided by the central service agency were predominently payroll services.

(g) The total indirect expenses developed for each division or bureau is carried forward to Exhibit E-1, where the relationship between the indirect expenses and direct salaries and wages of each division or bureau is used to develop indirect cost rates.

EXHIBIT E-1

SAMPLE FORMAT

DEPARTMENT OF ENVIRONMENTAL SERVICES
INDIRECT COST RATE PROPOSAL-MULTIPLE RATE METHOD
FOR THE FISCAL YEAR ENDED JUNE 30, 19–

Divisions/Bureaus	Indirect Costs (a)	Direct Salaries and Wages (b)	Indirect Cost Rates (a) ÷ (b) (c)
Air Quality and Noise	$ 62,054	$ 225,815	27.48%
Community Environmental Control	50,082	166,390	30.10%
Water Quality Management	48,326	166,390	29.04%
Solid Waste Disposal	121,347	415,975	29.17%
Parks and Forests	52,350	190,160	27.53%
Plant Construction	21,012	23,770	88.40%
	$355,171	$1,188,500	

(a) The amounts in this column are from Exhibit E.
(b) The amounts in this column are derived from and must be reconciled to the books and records of the department. Salaries and wages is the preferred base. However other bases may be used where it results in a more equitable allocation of costs. Generally, the same base should be used for all divisions, however, if approved by the cognizant Federal agency, different bases may be used for one or more of the divisions.
(c) The indirect cost rate for each division/bureau is computed by dividing the indirect costs for each division/bureau by the direct salaries and wages of that division/bureau.

DESCRIPTION OF EXHIBIT F

This Exhibit illustrates the consolidated cost allocation plan. The plan may be used only by local governments. This method is used in lieu of the central service cost allocation plan and department/agency indirect cost proposals. The advantage of this method to local governments is that it is simple and does not require the use of complex cost schedules to support cost allocations. However, the use of this method entails the acceptance of certain conditions which may result in less total recovery of indirect type costs to a local government. If the following conditions are recognized and accepted, a local government may opt to use the method:

a. Only indirect costs of certain central services will be accepted for allocation. The only central services includable under this method are those that demonstrably benefit Federally supported programs and which would have been allocated to Federal awards had the regular methods illustrated in Exhibits A and B through E been used.
b. Central service costs which do not qualify under a. above must be added to the base used to develop the indirect cost rate.
c. All costs of all local departments and agencies (excluding the costs in a. above) must be included in the base used to develop the indirect cost rate except for unallowable items such as interest expense and items that tend to distort the rate computation, such as major subcontracts and items of capital equipment. Indirect type costs incurred at the local department or agency level, including divisional indirect costs, cannot be proposed as indirect costs but must be treated as a base cost in developing the indirect cost rate.
d. Indirect type costs incurred at any level of government may not be charged to a federally supported program as a direct cost; e.g., accounting, purchasing, personnel. However direct charges such as motor pool, reproduction, communications, etc. will be allowed if (1) they are so identified on the consolidated central service plan and if (2) the grantee's system normally provides for directly assessing its departments and agencies for the use of these services using pricing or fee schedules designed to recover the actual costs of services used.

EXHIBIT F

SAMPLE FORMAT

CONSOLIDATED LOCAL CENTRAL SERVICE COST ALLOCATION PLAN
AND INDIRECT COST PROPOSAL
FOR THE YEAR ENDED JUNE 30, 19--

	Total	Expenditures Not Allowable (a)	Indirect Costs	Direct Costs: Salaries & Wages	Direct Costs: All Other
Indirect Cost Pool:					
Central Services Benefiting Federal Programs					
City Manager	$ 25,000		$ 25,000		
City Treasurer's Office (b)	41,000	$ 1,000	40,000		
Comptroller's Office (b)	48,500	3,500	45,000		
Personnel Department	30,000		30,000		
Building Use Allowance	5,000		5,000		
Indirect Cost Base(d):					
Central Services Not Benefiting Federal Programs					
Mayor's Office (c)	40,000			$ 25,000	$ 15,000
City Office (c)	60,000			40,000	20,000
City Treasurer's Office (b)	34,000	4,000		20,000	10,000
Comptroller's Office (b)	126,500	6,500		90,000	30,000
Costs of All Operating Departments and Agencies					
Dept. of Streets	730,000	500,000		150,000	80,000
Dept. of Health	160,000	10,000		120,000	30,000
Dept. of Justice	135,000	5,000		100,000	30,000
Dept. of Environmental Svcs.	520,000	400,000		90,000	30,000
Police Dept.	290,000	40,000		150,000	100,000
Fire Dept.	180,000	50,000		90,000	40,000
Totals	$2,425,000	$1,020,000	$145,000	$875,000	$385,000

Indirect Cost Rate Computation

$$\frac{\text{Indirect Costs}}{\text{Direct salaries \& wages}} \quad \frac{\$145,000}{\$875,000} = 16.6\%$$

Notes to Exhibit F

(a) Expenditures not allowable consist of capital expenditures, contracted construction and flow through monies, etc. These items are exlcuded from the computation because their inclusion would distort the assessment of indirect costs.

(b) In this illustration, the Treasurer's and Comptroller's office each conduct both direct and indirect activities. For example, the taxing function is contained in both offices (assessing, billing, collecting, etc.). The taxing function is considered a cost of general government and a direct activity. The offices also perform such activities as accounting, payroll, voucher payments, etc., these activities are considered indirect activities.

(c) Costs of the Mayor's Office and the City Council are stipulated in FMC 74-4 as costs of general Government and hence, are unallowable as indirect costs; however, these functions benefit from those costs classified as allowable indirect costs and must be included in the base used to calculate the indirect cost rate.

(d) The indirect cost base consists of the costs of all the functions and activities of local governments except (i) central services benefiting Federal programs and (ii) expenditures not allowable. Thus in this method, costs such as the salaries of department and division heads, secretaries, administrative supplies, etc. which could be treated as indirect cost under other methods, must be treated as direct costs and may not be charged to Federal programs as either indirect or direct costs.

INTERNAL CONTROL REVIEW QUESTIONNAIRE

AND DOCUMENTATION GUIDE

The material which follows was designed as an aid in reviewing internal controls. It consists of controls and suggestions for items which should be documented in the workpapers. The documentation items are in parenthases following certain questions. For the most part, the suggested documentation items have been recommended because auditors may wish to verify the related control aspects or procedures in the internal control-testing phase, if they intend to rely on the particular aspect in limiting the tests of account balances.

The questionnaire and documentation material does not purport to cover all aspects of internal control present at a particular organization. The material is designed to provide basic coverage, and the auditor should select those questions and documentation procedures most applicable to the system of internal control being audited.

The material does not address controls that may be present in an EDP environment nor compliance aspects which may be required under a particular categorical grant or loan program. Accordingly, the questionnaire and documentation material should be expanded to provide appropriate coverage of these areas.

The questionnaire should be retained in the workpapers. The auditor may choose to use this material only as a checklist and to document the review through memorandums, analysis papers, and flow charts.

GENERAL

The following questions relate to the internal accounting controls of the overall organization.

1. Are duties for key employees of the organization defined?

2. Is there an organization chart which sets forth the actual lines of responsibility?

3. Are written procedures maintained covering the recording of transactions?

   a. Covering an accounting manual?

   b. Covering a chart of accounts?

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4. Do the procedures, chart of accounts, etc., provide for identifying receipts and expenditures of program funds separately for each grant?

5. Does the accounting system provide for accumulating and recording expenditurss by grant and cost category shown in the approved budget?

6. Does the organization maintain a policy manual covering

   a. approval authority fur financial transactions and

   b. guidelines for controlling expenditures, such as purchasing requirements and travel authorizations?

7. Are there procedures governing the maintenance of accounting records?

   a. Are subsidiary records for accounts payable, accounts receivable, etc., balanced with control accounts on a regular baais? (List the types of records and the timing of reconciliation procedures.)

   b. Are journal entries approved and explained or supported?

   c. Do accrual accuunts provide adequate control over income and expense?

   d. Are accounting records and valuables secured in limited-access areas?

8. Are duties separated so that no one individual has complete authority over an entire financial transaction? (Document the segregation of duties or lack thereof affecting accounting system applications.)

9. Does the organization use an operating budget to control funds by activity?

10. Are there controls to prevent expenditure of funds in excess of approved, budgeted amounts? For example, are purchase requisitions reviewed against remaining amount in budget category?

APPENDIX I

11. Has any aspect of the organization's activitres been audited within the past 2 years by anuther guvernmental agency or independent public accountant? 1/

12. Has the organization obtained fidelity bond coverage for responsible officials? (Indicate the officials covered and the amounts of coverage.)

13. Has the organization obtained fidelity bond coverge in the amounts required by statutes or organization policy?

14. Are grant financial reports prepared for required accounting periods within the time imposed by the agencies? (Indicate the types of reports and the due dates.)

15. Does the organization have an indirect cost allocation plan or a negotiated indirect cost rate?

CASH RECEIPTS

The following conditions are indicative of satisfactory control over cash receipts.

1. The individual responsible for the cash receipts function does not sign checks or reconcile the bank accounts and is not responsible for noncash, accounting records, such as accounts receivable, the general ledger, or the general journal.

2. Receipts are deposited promptly and intact.

3. Current receipts are controlled by registers.

4. The organization has established procedures to minimize the time elapsing between the transfer of funds from the Federal Government and their disbursement.

The material which follows is designed to assist the auditor in reviewing and documenting the cash receipts function.

1/Pertinent prior audit reports, together with the organization's replies to audit comments, should be reviewed in connection with the current examination. The current workpapers should indicate key findings from this review.

1. Incoming mail:

   a. Are remittances listed on a control sheet for comparison with the bank deposit ticket?

   b. Are the check remittances restrictively endorsed by the person opening the mail?

2. Are all receipts required to be recorded promptly and deposited intact daily or at appropriate regular intervals? (Describe the practice followed.)

3. Does the cashier prepare duplicate deposit tickets so that one copy can be signed by the bank and returned for checking against the cash receipts record by another person?

4. Is the person receiving cash without authority to sign checks and reconcile bank accounts and without access to accounting records other than cash receipts?

5. Are currency receipts controlled by cash registers, vending machines, or controlled prenumbered receipt forms?

PROGRAM RECEIPTS FROM THE FEDERAL GOVERNMENT

1. Does the organization have grant agreements providing for funding under requests for advance payments or letters of credit? (Describe the method of funding.)

2. Does the organization have procedures, including cash requirement projections, minimizing the time between the transfer of funds from the Federal Government and their disbursements?

3. Are Federal funds deposited in a separate bank account or accounted for through grant-loan fund control accounts?

4. Does the organization's calculation of federal funds required consider updated estimates of allowable program costs?

BILLING AND RECEIVABLES

The following conditions are indicative of satisfactory control over billing and receivables.

1. There are controls to insure that all goods shipped and services performed are billed and recorded.

2. Billing is by serially numbered invoices.

3. All documents supporting billings, such as shipping orders and service tickets, are also serially numbered.

4. Price lists or contractual terms covering goods and services are used for computing billing amounts. Exceptions to price list amounts are approved by an organization official.

5. Detailed receivable records are periodically balanced with the general ledger control accounts.

6. Noncash credits to receivables are approved by an organization official.

7. An aged trial balance of receivables is periodically prepared and followup action is taken on overdue balances.

8. Duties are adequately separated so that the individual responsible for maintaining the receivable records does not have access to cash, approve credit to customers, authorize noncash credits to receivables, or authorize shipments of goods or performance of services.

BILLINGS

The material which follows is designed to assist the auditor in reviewing and documenting the billing and receivable functions.

1. Is the billing department notified of charges to be billed (a) for merchandise shipments, by receiving a copy of the shipping documents directly from the shipping department or (b) for services performed, by receiving a copy of the record of services performed directly from the individual or group performing the services? (Describe the practice followed.)

2. Are shipping documents and services records prenumbered and correlated with billing invoices?

3. Are billing invoices prenumbered and accounted for?

4. Are billing prices based on standard price lists or contractual agreements? (Describe procedure.)

5. If billing amounts are not based on standard price lists or contracts, are amounts approved by an official outside the billing department?

6. Are prices and extensions on billings independently verified?

7. Is a copy of the billing invoice sent directly to the accounts receivable department?

8. Are there procedures to control the issuance of free merchandise and services? (Describe controls.)

9. Are there procedures to control the receipt of funds for miscellaneous transactions, such as (a) the sale or rental of property and equipment and (b) income from investments? (Describe procedures.)

RECEIVABLES

1. Are receivables detail ledgers periodically balanced with general ledger control accounts? (Describe practice.)

2. Are statements of account periodically prepared and mailed to debtors?

3. Are aged trial balances of receivables periodically prepared and reviewed by the credit department or some designated employee not responsible for billings, cash, or receivables? (Describe procedures.)

4. Are notes receivable approved by an official before they are accepted by the organization?

5. Are notes and collateral periodically inspected by someone other than the custodian?

6. Is there control over followup action on delinquent accounts? (Describe the control procedures.)

7. Are noncash reductions of receivables approved by an organization official?

8. Are there controls over advances to and receivables from employees?

PURCHASING, RECEIVING, AND ACCOUNTS PAYABLE

The following conditions are indicative of satisfactory control over purchasing, receiving, and accounts payable.

1. Prenumbered purchase orders are used for all items of cost and expense.

2. There are procedures to insure procurement at competitive prices.

3. Receiving reports are used to control the receipt of merchandise.

4. There is effective review by a responsible official following prescribed procedures for program coding, pricing, and extending vendors' invoices.

5. Invoices are matched with purchase orders and receiving reports.

6. Costs are reviewed for charges to direct and indirect cost centers in accordance with applicable grant agreements and applicable Federal Management Circulars pertaining to cost principles.

7. When accrual accounting is required, the organization has adequate controls, such as checklists for statement-closing procedures, to insure that open invoices and uninvolved amounts for goods and services received are properly accrued or recorded in the books or controlled through worksheet entries.

8. There is adequate segregation of duties in that different individuals are responsible for (a) purchase (b) receipt of merchandise or services, and (c) voucher approval.

The following questions are designed to assist the auditor in reviewing and documenting the purchasing, receiving, and accounts payable functions.

PURCHASING

1. Is the purchasing function separate from accounting and receiving?

2. Does the organization obtain competitive bids for items, such as rental or service agreements, over specified amounts? (Indicate the amounts.)

3. Is the purchasing agent required to obtain additional approval on purchase orders above a stated amount? (Indicate the amount.)

4. Are there procedures to obtain the best possible price for items not subject to competitive-bidding requirements, such as approved vendor lists and supply item catalogs? (Describe the procedures.)

5. Are purchase orders required for purchasing all equipment and services?

6. Are purchase orders controlled and accounted for, by prenumbering and keeping a logbook? (Describe method.)

7. Do grant-loan agreements or related regulations impose requirements which differ from the organization's normal policies, such as competitive-bid requirements? (List exceptions.)

8. Is the purchasing department required to maintain control over items or dollar amounts requiring the contracting officer's advance approval? (If yes, describe controlling factors.)

9. Under the terms of OMB Circular 74-4, certain costs and expenditures incurred by units of State and local governments are allowable only upon specific prior approval of the grantor Federal agency. Determine whether the grantee organization has established policies and procedures governing the prior approval of expenditures in the following categories.

   a. Automatic data processing costs.

   b. Building space rental costs.

   c. Costs related to the maintenance and operation of the organization's facilities.

   d. Costs related to the rearrangement and alteration of the organization's facilities.

   e. Allowances for depreciation and use of publicly owned buildings.

   f. The cost of space procured under a rental-purchase or a lease-with-option-to-purchase agreement.

   g. Capital expenditures.

   h. Insurance and indemnification expenses.

   i. The cost of management studies.

   j. Preagreement costs.

   k. Professional services costs.

   l. Proposal costs.

10. Under the terms of OMB Circular 74-4, certain costs incurred by units of State and local governments are not allowable as charges to Federal agency grants. Determine whether the grantee organization has established policies and procedures to preclude charging Federal grant programs with the following types of costs.

   a. Bad debt expenses.

   b. Contingencies.

   c. Contribution and donation expenditures.

   d. Entertainment expenses.

   e. Fines and penalties.

   f. Interest and other financial costs.

   g. Legislative expenses.

   h. Charges representing the nonrecovery of costs under grant agreements.

   i. The expenses of a State Governor or chief executive of a political subdivision.

RECEIVING

1. Does the organization have a receiving function to handle receipt of all materials and equipment?

2. Are supplies and equipment inspected and counted before acceptance for use?

3. Are quantities and descriptions of supplies and equipment checked by the receiving department against a copy of the purchase order or some other form of notification?

4. Is a logbook or permanent copy of the receiving ticket kept in the receiving department?

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ACCOUNTS PAYABLE

1. Is control established over incoming vendor invoices?

2. Are receiving reports matched to the vendor invoices and purchase orders, and are all of these documents kept in accessible files?

3. Are charges for services required to be supported by evidence of performance by individuals other than the ones who incurred the obligations?

4. Are extensions on invoices and applicable freight charges checked by accounts payable personnel?

5. Is the program to be charged entered on the invoice and checked against the purchase order and approved budget?

6. Is there an auditor of disbursements who reviews each voucher to see that proper procedures have been followed?

7. Are checks adequately cross-referenced to vouchers?

8. Are there individuals responsible for accounts payable other than those responsible for cash receipts?

9. Are accrual accounts kept for items which are not invoiced or paid on a regular basis?

10. Are unpaid vouchers totaled and compared with the general ledger on a monthly basis? (If not, indicate when the procedure is done.)

CASH DISBURSEMENTS

The following conditions are indicative of satisfactory controls over cash disbursements.

1. Duties are adequately separated, different persons prepare checks, sign checks, reconcile bank accounts, and have access to cash receipts.

2. All disbursements are properly supported by evidence of receipt and approval of the related goods and services.

3. Blank checks are not signed.

4. Unissued checks are kept in a secure area.

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5. Bank accounts are reconciled monthly.

6. Bank accounts and check signers are authorized by the board of directors or trustees.

7. Petty cash vouchers are required for each fund disbursement.

8. The petty cash fund is kept on an imprest basis.

The following material is designed to assist the auditor in reviewing and documenting cash disbursements.

1. Are checks controlled and accounted for with safeguards over unused, returned, and voided checks?

2. Is the drawing of checks to cash or bearer prohibited?

3. Do supporting documents, such as invoices, purchase orders, and receiving reports, accompany checks for the check signers' review?

4. Are vouchers and supporting documents appropriately canceled (stamped or perforated) to prevent duplicate payments?

5. If check-signing plates are used, are they adequately controlled (i.e., maintained by a responsible official who reviews and accounts for prepared checks)?

6. Are two signatures required on all checks or on checks over stated amounts? (Document the procedure followed.)

7. Are check signers responsible officials or employees of the organization? (Obtain a list of authorized signers for the workpapers.)

8. Is the person who prepares the check or initiates the voucher other than the person who mails the check?

9. Are bank accounts reconciled monthly and are differences resolved? (If not, what are the procedures?)

10. Concerning petty cash disbursements:

    a. Is petty cash reimbursed by check and are disbursements reviewed at that time?

b. Is there a maximum amount, reasonable in the circumstances, for payments made in cash? (Indicate the amount.)

c. Are petty cash vouchers written in ink to prevent alteration?

d. Are petty cash vouchers canceled upon reimbursement of the fund to prevent their reuse?

PAYROLL

The following conditions are indicative of satisfactory controls over payroll.

1. Written authorizations are on file for all employees, covering rates of pay, withholdings, and deductions.

2. The organization has written personnel policies covering job descriptions, hiring procedures, promotions, and dismissals.

3. Distribution of payroll charges is based on documentation prepared outside the payroll department.

4. Payroll charges are reviewed against program budgets, and deviations are reported to management for follow-up action.

5. Adequate timekeeping procedures, including the use of timeclocks or attendance sheets and supervisory review and approval, are employed for controlling paid time.

6. Payroll checks are prepared and distributed by individuals independent of each other.

7. Other key payroll and personnel duties, such as timekeeping, salary authorization, and personnel administration, are adequately separated.

The material which follows is designed to assist the auditor in reviewing and documenting the payroll function.

1. Are personnel policies in writing?

2. Are payroll and personnel policies governing compensation in accordance with the requirements of grant agreements?

3. Are there procedures to control time and attendance reporting?

a. Are timecards or attendance sheets used? (Indicate the method.)

b. Is supervisory approval of time and attendance reports required?

4. Are there procedures to insure that employees are paid in accordance with approved wage and salary rates?

5. Is the distribution of payroll charges checked by a second person and are aggregate amounts compared to the approved budget?

6. Are authorizations on file covering rates of pay, withholdings, and deductions?

7. Are wages paid at or above the Federal minimum wage?

8. Are procedures adequate for controlling (a) overtime wages, (b) overtime work authorization, and (c) supervisory approval of overtime?

9. Are payroll checks distributed by persons not responsible for preparing the checks?

PROPERTY AND EQUIPMENT

The following conditions are indicative of satisfactory control over property and equipment.

1. There is an effective system of authorization and approval of capital equipment expenditures.

2. Accounting practices for recording capital assets are reduced to writing.

3. Detailed records of individual capital assets are kept and periodically balanced with the general ledger accounts.

4. There are effective procedures for authorizing and accounting for disposals.

5. Property and equipment is stored in a secure place.

The following questions are designed to assist the auditor in reviewing and documenting the system of control over property and equipment.

1. Are executive authorizations and approvals required for originating expenditures for capital items?

2. Are expenditures for capital items reviewed for grantor approval before funds are committed?

3. Are supplemental authorizations, including those of the grantor agency, required for expenditures in excess of orlginally approved amounts?

4. Does the organization have established policies covering capitalization and depreciation? (Describe policies.)

5. Does the organization charge depreciation or use allowances on property and equipment against any grant programs which it administers?

6. Is historical cost the basis for computing depreciation or use allowances?

7. Are the organization's depreciation policies or methods of computing use allowancee in accord with the standards outlined in federal circulars or agency regulations?

8. Are there detailed records showing the asset values of individual units of property and equipment?

9. Are detailed property records periodically balanced to the general ledger?

10. Are detailed property records periodically checked by physical inventory?

11. Are differencee between buok records and physical counts reconciled and are the records adjusted to reflect shortages?

12. Are there procedures governing the dieposition of property and equipment? (Describe procedures.)

13. Is the estimated salvage value noted on the authorization order relative to disposition of property and equipment?

14. Are periodic reports submitted showing obsolete equipment, equipment needing repair, or equipment no longer useful to the organization? (Describe reports.)

INDIRECT COSTS

1. Does the organization have an indirect cust allocation plan or a negotiated indirect cost rate? (Paragraph F, Attachment A, Circular 74-4.)

2. Is the plan prepared in accordance with the provisions of OMB Circular 74-4?

3. Has audit cognizance for the plan been established and are the rates accepted by all participating Federal and State agencies?

4. Does the organization have procedures which provide assurance that consistent treatment is applied in the distribution of charges as direct or indirect costs to all grants?

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